

Northern Sub-Area Study & GA 400 Corridor Analysis

Transit Operations Plans and Analysis



Prepared by:



*Manuel Padron & Associates, Inc.
A Member of the Parsons Brinckerhoff Team*

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FORWARD

The Northern Sub-Area Study & GA 400 Corridor Analysis (NSAS/GA 400)

The Northern Sub-Area Study/GA 400 Corridor Analysis is an effort conducted under the direction of the Georgia Regional Transportation Authority (GRTA) to study, evaluate and, finally, to recommend three alternative mid- and long-term (2025) strategies for transportation investments and land use policies in the Northern Sub-Area. It evaluated land use, transportation, natural and social environments, and air quality issues in the Northern Sub-Area. The Northern Sub-Area is defined as the area three miles west of I-75, three miles north of GA 20, three miles east of I-85 and I-285 on the south.

The purposes of the Northern Sub-Area Study include:

- providing relevant information on the Study Area for consideration in the regional transportation planning process
- providing the planning agencies, cities and counties with alternative strategies for addressing the Study Area's current and future transportation, air quality and land use needs
- providing demand and system management options for the Study Area
- using mechanisms for public involvement similar to those employed for the Appalachian Scenic Corridor study
- satisfying the requirements of the Atlanta Agreement and the Settlement Agreement for GTA vs. Shackelford

The Study was conducted over a 27-month period. This time frame permits the Study's results to be incorporated into the Atlanta Regional Commission's efforts to produce the 2030 Regional Transportation Plan and Regional Development Plan. The Consultant Team efforts were directed by the GRTA with advice from the Study Steering Committee.

The NSAS & GA 400 Study was conducted by the Parsons Brinckerhoff Consulting Team:

Parsons Brinckerhoff Quade & Douglas, Inc.

PBS&J

AECOM Consulting Transportation Group

HNTB-LDR

Moreland Altobelli Associates

Manuel Padron & Associates, Inc.

Howard/Stein-Hudson Associates, Inc.

Sycamore Consulting, Inc.

Planners for Environmental Quality

Center For Neighborhood Technology



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EXECUTIVE SUMMARY

The Northern Sub-Area Study/GA 400 Corridor Analysis is an effort conducted under the direction of the Georgia Regional Transportation Authority (GRTA) to study and evaluate three alternative strategies for transportation investments and land use policies in the Northern Sub-Area. Lessons learned from this effort will provide the planning agencies, cities and counties with alternative strategies for addressing the Sub-Area's current and future transportation, air quality and land use needs.

This Technical Memorandum is intended to provide a description of the fixed guideway and bus operations plans included in the baseline and final three alternatives that were defined and analyzed. The detailed transit and related project lists are not intended to be recommendations for actions by the implementing agencies. Rather, the specific projects are defined to build system-level alternatives so as to ascertain the impacts of alternative strategies in the achievement of each alternative's focus.

Each alternative is described in terms of the fixed guideway operations, bus operations, and the operating plan results from the transportation demand model. The fixed guideway operations plans define the line segments, service frequencies, and stations. The bus operations plans define the park-ride lots and local and express bus routes, alignments, and service frequencies. The operating plan analysis results highlight key transit performance measures and outcomes of each alternative. In addition, the operating plan results for the fixed guideways identify proposed service levels and estimates of peak and fleet vehicle requirements, annual revenue train-hours and car-miles (bus-hours and bus-miles for bus rapid transit lines). For the local and express buses, the operating plan results summarize changes from the baseline, proposed service levels, and estimates of vehicle trips, peak bus requirements, revenue bus-miles and revenue bus-hours. All alternatives are analyzed with a 2025 horizon year.

The Technical Memorandum also documents the transit capital and operating and maintenance (O&M) cost methodologies which are developed to estimate transit capital and O&M costs estimates for each alternative. Transit capital cost methodologies are provided for park-ride lots, buses, and all fixed guideway modes (inclusive of design, property acquisition, and construction for guideways, stations, systems, yards and shops, and soft costs). Resource build-up O&M cost models are provided for all fixed guideway modes and buses. Finally, the transit capital and O&M cost estimate results for the baseline and final three alternatives are presented.

The Baseline Alternative is the Regional Transportation Plan (RTP) transportation network as adopted in the Atlanta Regional Commission (ARC) 2025 RTP Limited Update (adopted October 23, 2002). The limited update of the RTP is based on the 2025 land use distribution of households and employment

adopted in the ARC Regional Development Plan (adopted May 26, 1999). Fixed guideways include the Northwest fixed guideway, MARTA North Line extension, and Cumberland People Mover. Capital and O&M costs for the Baseline Alternative are estimated to be approximately \$3.43 billion and \$169.34 million, respectively.

Alternative 1 focuses on the objective of improving system performance. It adds fixed guideways on I-285 and I-85, and adds two stations to the North Line extension. It modifies and refines bus services currently in the RTP to more effectively interface with the fixed guideway service. New bus routes are added in major activity centers and underserved areas and corridors.

Based on the model run, Alternative 1 results in 251,850 daily transit trips being made within, into, or from the Northern Sub-Area. With Transportation Demand Management (TDM) Level 1 measures included in the model run, there are about 247,600 daily transit trips. Both results represent substantial growth over the 188,100 daily transit trips in the Baseline Alternative.

Focusing on commute trips, the transit share of work trip productions is 11.3 percent, an increase of approximately 50 percent. And there is a 5.3 percent reduction in average transit travel time per commute trip. Capital costs for Alternative 1 are estimated to be \$1.02 billion higher than the Baseline Alternative. O&M costs for Alternative 1 are estimated to be \$67.78 million higher, with the increase split fairly evenly between fixed guideway (LRT and BRT) costs, which are higher by \$30.30 million, and express and local bus costs (\$37.47 million higher).

Alternative 2 focuses on the objective of implementing the proposed 2030 Regional Development Plan policies. The household and employment forecast control totals established for the 2025 RTP Limited Update are held constant in this alternative. However, the distribution of households and employment are modified to enhance the proposed policies. For example, the distribution is modified to focus development in existing centers and corridors, provide higher density transit-supportive development around transit stations, and provide growth management/ buffers in environmentally sensitive areas. To evaluate the effects of this policy-based land use distribution on the transportation system, the fixed guideway and bus operations are the same as defined for Alternative 1. Alternative 2 results in about 281,150 daily transit trips being made within, into, or from the Northern Sub-Area. With Transportation Demand Management (TDM) Level 2 measures included in the model run, there are about 304,350 daily transit trips. Both results represent substantial growth over Alternative 1 of 251,850 daily transit trips without TDM measures and 247,600 daily transit trips with TDM measures. Focusing on commute trips, the transit share of work trip productions is 13.5 percent without TDM measures and 15.6 percent with TDM measures, increases over Alternative 1 of approximately

20 percent and 38 percent, respectively. And there is about a 3.8 percent reduction in average transit travel time per commute trip in Alternative 2 compared to Alternative 1. Capital and O&M costs for Alternative 2 are \$0.11 billion and \$5.75 million higher than Alternative 1, respectively. The additional costs for Alternative 2 are primarily due to the need to purchase and operate additional LRT and BRT vehicles to accommodate demand. Conversely, capital and O&M costs for local and express bus service are slightly lower in Alternative 2 than Alternative 1, due to slightly higher average operating speeds. O&M costs, for example, increased by \$5.99 million for fixed guideway, but decreased by \$0.25 million for express and local bus operations.

Alternative 3 focuses on the use of local and county land use and transportation plans as the basis for an alternative mobility investment strategy. Thus, for the transit network, no changes are made to transit services included in local transit plans. The local distribution of households and employment are used, but the local household and employment forecasts are scaled-back to control totals consistent with the forecasts established for the 2025 RTP Limited Update. Alternative 3 results in 253,800 daily transit trips being made within, into, or from the Northern Sub-Area. This result represents substantial growth over the 188,100 daily transit trips in the Baseline Alternative. Focusing on commute trips, the transit share of work trip productions is 10.5 percent, an increase of approximately 38 percent. And there is a 0.7 percent increase in average transit travel time per commute trip.

Capital costs for Alternative 3 are estimated to be \$.66 billion higher than the Baseline Alternative. O&M costs for Alternative 3 are estimated to be \$29.83 million higher than the Baseline Alternative, with the increase split fairly evenly between fixed guideway (LRT and BRT) costs, which are higher by \$15.15 million, and express and local bus costs (\$14.68 million higher).

In terms of mobility, proposed transit improvements in the alternatives significantly increase the number of households with walk access to transit, from 43 percent in the RTP to a range of 50 – 62 percent across the alternatives. Likewise, the number of jobs with walk access to transit increases from 60 percent in the RTP to a range of 64 – 68 percent across the alternatives. There are many dramatic improvements in transit travel times within the Study Area, making some transit services competitive with highway travel for major trip origin-destination pairs.

In terms of transit utilization, all alternatives result in increased transit use in the Study Area compared to today and the RTP. Transit share of work trips in the Study Area increases from 4 percent today to about 8 percent in the RTP to a maximum of about 16% in the most aggressive alternative. There are promising levels of ridership on all proposed fixed guideways (Northwest, GA 400, I-285, and I-85) that are sufficient to justify further corridor analysis. In the Alternative

2 strategy, the increased densities in centers and corridors that are served by transit significantly increase transit trips.

1.0 INTRODUCTION

The purpose of this Technical Memorandum is to document transit operating plans and analysis results, transit capital cost and operating and maintenance (O&M) cost estimating models (or methodologies), and transit capital and O&M costs results prepared for the Northern Sub-Area Study/GA 400 Corridor Analysis (NSAS/GA 400). The Northern Sub-Area Study is an effort conducted under the direction of the Georgia Regional Transportation Authority (GRTA) to study and evaluate three alternative strategies for transportation investments and land use policies in the Northern Sub-Area. The Northern Sub-Area is defined as the area three miles west of I-75, three miles north of Georgia State Route (SR) 20, three miles east of I-85, and I-285 on the south.

The purposes of the Northern Sub-Area Study include providing the planning agencies, cities and counties with alternative strategies for addressing the Sub-Area's current and future transportation, air quality and land use needs and providing relevant information on the Sub-Area for consideration in the regional transportation planning process, that is, the upcoming development and adoption of the Atlanta Regional Commission's 2030 Regional Transportation Plan and Regional Development Plan.

1.1 Description of Alternatives

This Technical Memorandum is intended to provide a description of the fixed guideway and bus operations plans included in the baseline and final three alternatives that were defined and analyzed. The detailed transit and related project lists are not intended to be recommendations for actions by the implementing agencies. Rather the specific projects are defined to build system-level alternatives so as to ascertain the impacts of alternative strategies in the achievement of each alternative's focus.

The Baseline Alternative is the Regional Transportation Plan (RTP) transportation network as adopted in the Atlanta Regional Commission (ARC) 2025 RTP Limited Update (adopted October 23, 2002). The limited update of the RTP is based on the 2025 land use distribution of households and employment adopted in the ARC Regional Development Plan (adopted May 26, 1999).

Alternative 1 is the "Needs Based" alternative. Alternative 1 focuses on the objectives of improving system performance and addressing unmet needs in the ARC 2025 RTP Limited Update. Alternative 1 retains the 2025 land use distribution of households and employment in the ARC Regional Development Plan (adopted May 26, 1999). The Alternative 1 transportation network includes all 2025 RTP projects and adds RTP "illustrative" projects and "lessons learned" from Phase 1 of this NSAS/GA 400 Study.

Alternative 2 is the “Policy Based” alternative. The objective of Alternative 2 is to direct land use and mobility enhancements to accomplish the proposed 2030 Regional Development Plan policies (proposed August 2002). The household and employment forecast control totals established for the 2025 RTP Limited Update are held constant in this alternative. However, the distribution of households and employment are modified to enhance the proposed policies. For example, the distribution is modified to focus development in existing centers and corridors, provide higher density transit-supportive development around transit stations, and provide growth management/ buffers in environmentally sensitive areas. As a policy, Alternative 2 calls for earlier implementation of transit projects to support the resulting more focused land development.

Alternative 3 is the “Local Plans Based” alternative. The objective of Alternative 3 is to use local and county land use and transportation plans as the basis for an alternative mobility investment strategy. Thus, for the transit network, no changes are made to transit services included in local transit plans. The local distribution of households and employment are used, but the local household and employment forecasts are scaled-back to control totals consistent with the forecasts established for the 2025 RTP Limited Update.

Travel Demand Management (TDM) concepts also were defined and evaluated. The TDM concepts and their evaluation are more fully described in the TDM Model Technical Memorandum. In general, the TDM measures consisted of Employer Support Programs such as preferential treatment for car pools and transit users and Work Hour Management Programs such as flex time, staggered work hours, compressed work week, and telecommuting. These programs were focused on six major development areas in the NSAS – Perimeter, Galleria, Town Center, Gwinnett Place, North Point, and Gwinnett Technology Park. Two levels of employer support were analyzed – Voluntary or Level 1 and Mandatory or Level 2. Alternative 1 was evaluated with and without applying the TDM Level 1 measures. Alternative 2 was evaluated with and without applying the TDM Level 2 measures.

1.2 Contents of Technical Memorandum

The transit operations plans are described for the Baseline Alternative, Alternative 1, Alternative 2, and Alternative 3 in Sections 2, 3, 4 and 5, respectively. Each section describes the fixed guideway operations, bus operations, and the operating plan results from the transportation demand model. The fixed guideway operations plans define the line segments, service frequencies, and stations. The bus operations plans define the park-ride lots and local and express bus routes, alignments, and service frequencies. The operating plan analysis results highlight key transit performance measures and outcomes of each alternative. In addition, the operating plan results for the fixed guideways identify proposed service levels and estimates of peak and fleet vehicle requirements, annual revenue train-hours and car-miles (bus-hours and

bus-miles for bus rapid transit lines). For the local and express buses, the operating plan results summarize changes from the baseline, proposed service levels, and estimates of vehicle trips, peak bus requirements, revenue bus-miles and revenue bus-hours. All alternatives are analyzed with a 2025 horizon year.

Section 6 of this Technical Memorandum documents the transit capital and O&M cost methodologies which are developed to estimate transit capital and O&M costs estimates for each NSAS alternative. Transit capital cost methodologies are provided for park-ride lots, buses, and all fixed guideway modes (inclusive of design, property acquisition, and construction for guideways, stations, systems, yards and shops, and soft costs). Resource build-up O&M cost models are provided for all fixed guideway modes and buses. Finally, Section 6 presents the transit capital and O&M cost estimate results for the Baseline Alternative and the three alternatives.

2.0 BASELINE ALTERNATIVE

The Baseline Alternative is the Regional Transportation Plan (RTP) transportation network as adopted in the Atlanta Regional Commission (ARC) 2025 RTP Limited Update (adopted October 23, 2002). The limited update of the RTP is based on the 2025 land use distribution of households and employment adopted in the ARC Regional Development Plan (adopted May 26, 1999).

2.1 Fixed Guideway Operations

The Baseline Alternative fixed guideways include existing Northern Sub-Area segments of the Metropolitan Atlanta Rapid Transit Authority's (MARTA) North and Northeast Lines, as well as three additional RTP investments. Table 2.1-1 summarizes the three Baseline Alternative fixed guideway investments in the Northern Sub-Area.

Table 2.1-1 | Baseline Alternative – Fixed Guideway Investments

Project Description	Source	ARC Number
Northwest Fixed Guideway, MARTA Arts Center Station to Town Center	2025 RTP Limited Update project	AR 251A, AR 251B, AR 251C
GA 400/North Line Extension, MARTA North Springs Station to Windward Station	2025 RTP Limited Update project	M-AR 234A, M-AR 234B, M-AR 234C
Cumberland People Mover	2025 RTP Limited Update project	AR 259A, AR 259B, AR 259C

2.1.1 Fixed Guideway Service Frequencies

The Baseline Alternative operations plan retains the RTP fixed guideway service frequencies (Table 2.1-2) in the Northern Sub-Area.

Table 2.1-2 | Baseline Alternative – Fixed Guideway
Service Frequencies

Fixed Guideway	Start/End Stations	Peak Headway	Base Headway	Evening Headway
Northwest	Town Center Station to MARTA Arts Center Station	8	8	10
GA 400/North Line Extension	MARTA North Springs Station to Windward Station	10	10	12
Cumberland People Mover	Loop with 13 stops including Cumberland & Galleria stations	5	8	10

2.1.2 Stations

Station assumptions by guideway are summarized in Table 2.1-3. The fixed guideway operations plan assumes that the existing/planned park-ride lots at I-75/Town Center and GA 400/Windward Parkway are converted to fixed guideway stations.

Table 2.1-3 | Baseline Alternative – Station Locations

Northwest	400/North
Town Center	GA 400/Holcomb Bridge
Elizabeth (Hwy 5)	North Point Mall
Big Chicken	Windward
South Loop	
Delk Road	
Windy Hill	
Cumberland	

2.2 Bus Operations

2.2.1 Non-Guideway Park-Ride Lots

Existing park-ride lots that are assumed to be used in conjunction with bus operations are located at:

- Canton (SR 5 Business north of Etowah River)
- GA 400 & Mansell Road
- I-985 & SR 20
- I-85 & Indian Trail Road

In addition, Table 2.2-1 lists the three currently authorized and eight planned park-ride lot investments in the Baseline Alternative. Current project status in the RTP and 2003-2005 Transportation Improvement Program (TIP) is listed also.

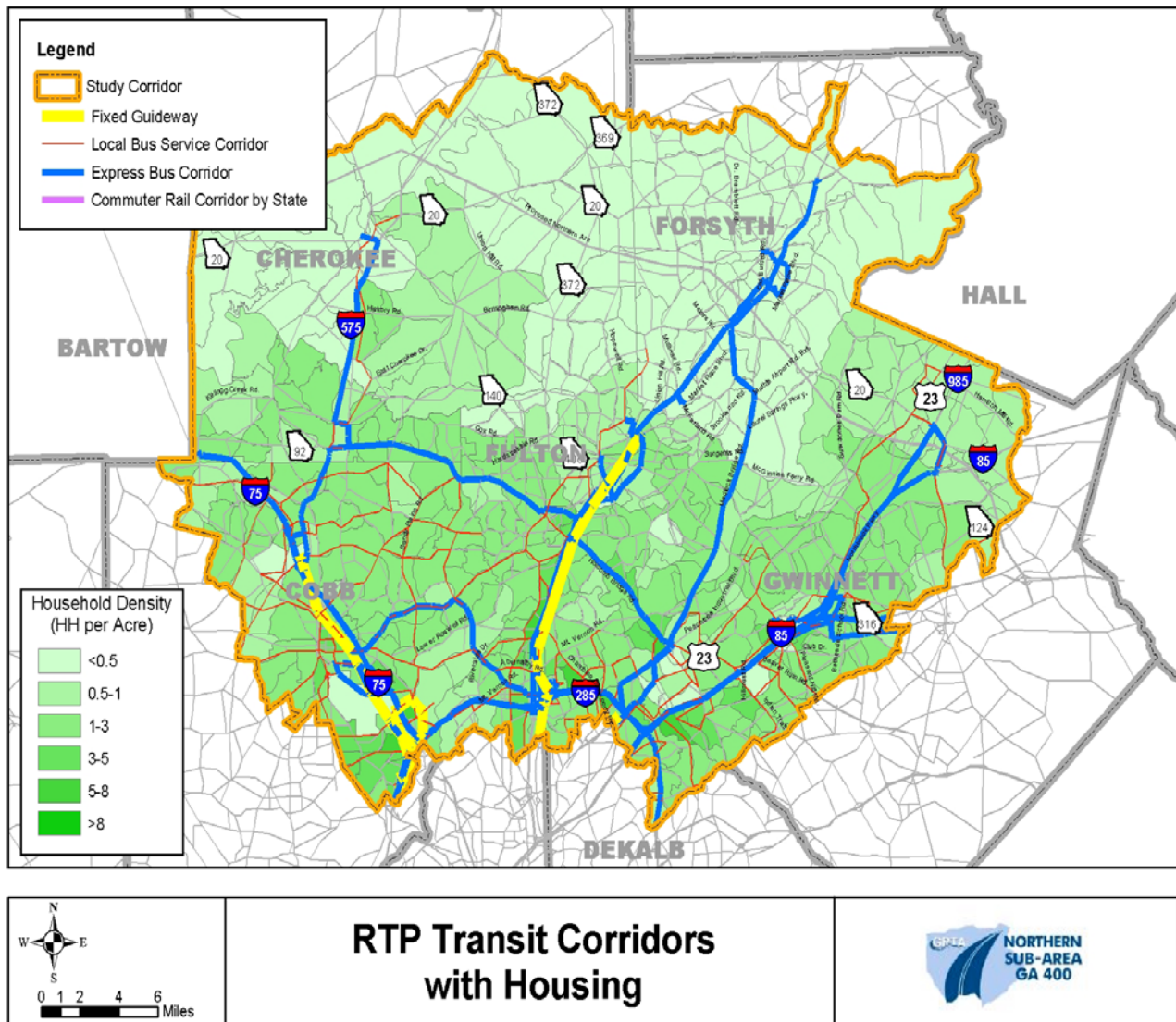
Table 2.2-1 | Baseline Alternative – Park-Ride Lot Investments

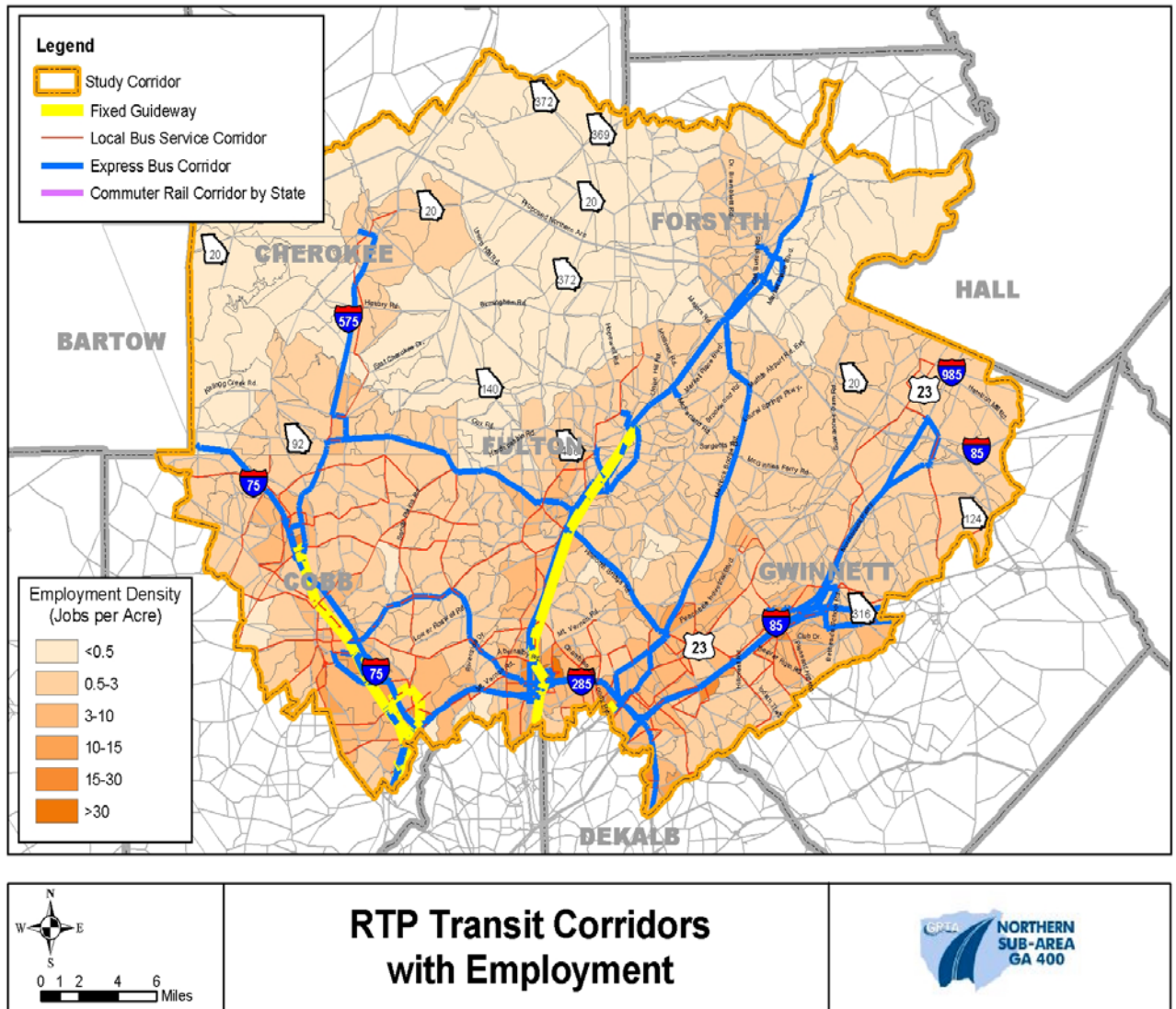
ARC Number	Project Description	RTP/TIP Status
CO-AR-290	I-75 & Lake Acworth Drive/Cowan Road Park-Ride Lot	Authorized
AR-339B	SR 140 & SR 20 (Canton) Park-Ride Lot	RTP (2006-2010)
CH-AR-227	I-575 & Dupree Road Park-Ride Lot	RTP (2006-2010)
FN-AR-189	GA 400 & Old Milton Parkway (SR 120) Park-Ride Lot	RTP (2011-2015)
AR-339A	GA 400 & McFarland Road Park-Ride Lot	2003-2005 TIP
AR-339A	GA 400 & SR 306 Park-Ride Lot	2003-2005 TIP
AR-339A	Downtown Cumming Park-Ride Lot	2003-2005 TIP
AR-339A	GA 400 & Old Atlanta Road Park-Ride Lot (incl. ramps to GA 400)	2003-2005 TIP
AR-339A	SR 141 & McGinnis Ferry Road Park-Ride Lot	2003-2005 TIP
GW-AR-232	I-85 & Sugarloaf Parkway (Discover Mills) Park-Ride Lot	Authorized
GW-AR-231	SR 316 & Collins Hill Road Park-Ride Lot	Authorized

2.2.2 Bus Route Operations

The Baseline Alternative includes 49 local-service bus routes and 24 express-service bus routes in the Northern Sub-Area. The routes include existing and planned MARTA, Cobb Community Transit (CCT), and Gwinnett County Transit (GCT) routes and service levels in the RTP, as well as a planned Cherokee County route and the GRTA express routes included in the RTP. These routes are documented in the ARC RTP document set: *Transportation Solutions For A New Century*, October, 2002, Volume 1 and Appendix 2, Atlanta Regional Commission. The Baseline Alternative bus routes provide 1,985 route miles of service in the Northern Sub-Area. About 43 percent of Northern Sub-Area households and 60 percent of Northern Sub-Area jobs are within 0.4 mile of a transit station or stop.

Two figures follow that illustrate the fixed guideway, express bus, and local bus corridors in the Baseline (RTP) Alternative mapped on the household and employment densities assumed in the 2025 Regional Development Plan (adopted May 26, 1999).





2.3 Operating Plan Results

Based on the model run, the Baseline Alternative results in about 188,100 daily transit trips being made within, into, or from the Northern Sub-Area. Focusing on commute trips, the transit share of work trip productions is 7.6 percent. And there is an average transit travel time per commute trip of 43.5 minutes.

Since the fixed guideways operate as a regional system, the fixed guideway operating plans for each alternative include the operating statistics for the entire region. However, Table 2.3-1 is provided as a “pivot point” operating plan for all alternatives so that the incremental operating statistics attributable to each alternative’s Northern Sub-Area fixed guideways can be easily calculated, if desired. Table 2.3-1 presents 2025 fixed guideway operating statistics for the RTP Limited Update fixed guideways, **excluding the Northwest LRT Line, the North Line extension to Windward Parkway, and the Cumberland People Mover**. In Section 6, this “pivot point” approach is also used in estimating the operating and maintenance (O&M) cost results for fixed guideways attributable only to the Northern Sub-Area. Note that by excluding the entire Northwest LRT line in the “pivot point” table, the Arts Center station to Cumberland station segment is also attributed to the Northern Sub-Area. This is done as there is no effective way to break out the operating statistics of a line segment. Since the Northwest LRT line is assumed in all alternatives, it does not affect the operating characteristics and O&M costs comparisons across the alternatives.

Table 2.3-2 presents 2025 fixed guideway operating statistics for the RTP fixed guideway system and the increments attributed to the Baseline Alternative. The operating requirements attributed to the Baseline Alternative for HRT are 29 cars, 7.12 million annual revenue car-miles, and 24,300 annual train-hours; for LRT, 60 cars, 7.08 million annual revenue car-miles, and 59,500 annual train-hours; and for Circulators, 12 cars, 720,000 annual revenue car-miles, and 43,200 annual car-hours.

Table 2.3-3 presents the 2025 weekday bus operations plan for the Baseline Alternative. This table lists the peak, base, and late evening service levels assumed in the RTP. The bus operations plan requires 473 peak buses and provides 75,526 daily bus-miles and 5,446 daily bus-hours of service.

Table 2.3-1 | 2025 RTP Limited Update – Fixed
Guideway Operating Plan
(excluding Northwest Line, North Line
Extension, and Cumberland Circulator)

2025 HRT Operating Plan without North Line Extension to Windward

From	To	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
				Peak	base	Sat/evelate/Sun		Peak	base	Sat/evelate/Sun		Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)
North-South Line															
Doraville	Airport	40.0	22.2	8	8	10	15	8	8	6	4	96	116	13.63	72.0
North Springs	Airport	42.0	24.1	8	8	10	15	8	8	6	4	104	125	13.78	77.8
North Springs	Lindbergh	16.0	10.0				15				4			0.42	6.6
Trunk Average/Total:				4	4	5						200	241	27.83	156.4
East-West Line															
Hightower	Indian Creek	29.0	14.9	8	8	10	15	6	6	5	4	54	65	7.27	54.3
Bankhead	King Mem	10.0	4.1	8	8	10	15	2	2	2	2	8	10	0.74	23.5
Trunk Average/Total:				4	4	5	8					62	75	8.01	77.8
TOTALS												262	316	35.83	234.2

2025 DeKalb LRT Operating Plan

From <u>DeKalb LRT</u>		To	Run Time (min.)	Distance (miles)	Headway			Consist				Vehicles		Annual Statistics:		
					Peak	Base	Sat/evelate/Sun	Peak	Base	Sat/evelate/Sun	Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)		
Lindbergh	South DeKalb		28.0	12.4	8	8	10	15	3	2	2	2	27	33	2.57	54.3
TOTALS													27	33	2.57	54.3

Note 1: Ten-minute peak frequencies were modeled for the heavy rail lines, per the current RTP. However, to accommodate load projections on the North and Northeast lines with 8-car trains, 8-minute peak frequencies on all heavy rail lines were assumed for the operating plans.

Note 2: Ten-minute peak frequencies were modeled for the Lindbergh-South DeKalb light rail line, per the current RTP. However, for consistency with the heavy and light rail line frequencies, 8-minute peak frequencies were assumed for the operating plans.

Table 2.3-2 | Baseline Alternative – Fixed Guideway
Operating Plan

2025 HRT Operating Plan

From		To		Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
						Peak	base	Sat/evelate/Sun	Peak	base	Sat/evelate/Sun	Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)		
North-South Line																	
Doraville		Airport		40.0	22.2	8	8	10	15	8	8	6	4	96	116	13.63	72.0
Windward Parkway		Airport		57.0	35.7	<u>8</u>	<u>8</u>	<u>10</u>	15	8	8	6	4	<u>128</u>	<u>154</u>	20.41	97.7
Windward Parkway		Lindbergh		31.0	21.6				15				4		<u>0.91</u>	<u>11.0</u>	
Trunk Average/Total:						4	4	5	8					224	270	34.95	180.7
East-West Line																	
Hightower		Indian Creek		29.0	14.9	8	8	10	15	6	6	5	4	54	65	7.27	54.3
Bankhead		King Mem		10.0	4.1	<u>8</u>	<u>8</u>	<u>10</u>	<u>15</u>	2	2	2	2	<u>8</u>	<u>10</u>	<u>0.74</u>	<u>23.5</u>
Trunk Average/Total:						4	4	5	8					62	75	8.01	77.8
TOTALS														286	345	42.95	258.5
HRT Attributed to Baseline														24	29	7.12	24.3

2025 LRT Operating Plan

From		To		Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
						Peak	Base	Sat/evelate/Sun	Peak	Base	Sat/evelate/Sun	Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)		
DeKalb LRT																	
Lindbergh		South DeKalb		28.0	12.4	8	8	10	15	3	2	2	2	27	33	2.57	54.3
Northwest LRT																	
Arts Center		Town Center		31.3	21.8	8	8	10	15	5	3	3	3	50	60	7.08	59.5
TOTALS														77	93	9.65	113.8
LRT Attributed to Baseline														50	60	7.08	59.5

2025 Fixed Route Circulator Operating Plan

	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
			Peak	Base	Sat/evelate/Sun	Peak	Base	Sat/evelate/Sun	Peak	Total	Car-Mi. (million)	Car-Hrs. (thous.)		
Cumberland Circulator	16.5	6.8	5	8	10	15	1	1	1	1	10	12	0.72	43.2
TOTALS											10	12	0.72	43.2
Circulator Attributed to Baseline											10	12	0.72	43.2

Note 1: Ten-minute peak frequencies were modeled for the heavy rail lines, per the current RTP. However, to accommodate load projections on the North and Northeast lines with 8-car trains, 8-minute peak frequencies on all heavy rail lines were assumed for the operating plans.

Note 2: Ten-minute peak frequencies were modeled for the Lindbergh-South DeKalb light rail line, per the current RTP. However, for consistency with the heavy and light rail line frequencies, 8-minute peak frequencies were assumed for the operating plans.

Note 3: For costing purposes, 5-car trains in the peak on the Northwest Line were assumed in order to meet line load projections. An alternative assumption would be 4-car trains with improved frequencies.

Table 2.3-3

Baseline Alternative – Average
Weekday Bus Operating Plan

TABLE 2.3-3
BASELINE ALTERNATIVE--AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Headways			Distance & Run Times		Daily Operating Statistics			
				Peak	Base	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Local	12 HOWEL	Midtown Sta to Northside Pkwy	1 way	20	30	30	8.49	49.6	46	5	390.5	37.2
Local	12 HOWEL-	Northside Pkwy to Midtown Sta	1 way	20	30	30	8.49	52.2	46	5	390.5	39.1
Local	124 CHAMB	Chamblee Sta to Tucker	1 way	21	30	30	10.08	52.8	45	5	455.0	38.8
Local	124 CHAMB-	Tucker to Chamblee Sta	1 way	21	30	30	10.08	40.1	45	5	455.0	29.5
Local	129 CHAMBL	Chamblee Sta to N Spgs Sta	1 way	40	40	60	8.76	47.2	28	3	240.9	21.2
Local	129 CHAMBL-	N Spgs Sta to Chamblee Sta	1 way	40	40	60	8.76	49.0	28	3	240.9	22.0
Local	132 TILL	Chamblee Sta to Tilly Mill	1 way	24	24	30	6.54	33.3	48	3	310.7	25.8
Local	132 TILL-	Tilly Mill to Chamblee Sta	1 way	24	24	30	6.54	37.6	48	3	310.7	29.1
Local	135 NSHFRD	Chamblee Sta to Peeler	1 way	30	30	60	5.21	24.5	35	2	182.4	14.1
Local	135 NSHFRD-	Peeler to Chamblee Sta	1 way	30	30	60	5.21	26.6	35	2	182.4	15.3
Local	148 POWER	Sandy Spgs Sta to Powers Ferry	1 way	35	40	60	6.35	33.2	29	2	182.8	15.6
Local	148 POWER-	Powers Ferry to Sandy Spgs Sta	1 way	35	40	60	6.35	35.4	29	2	182.8	16.7
Local	150 PERI	Dunwoody Sta to Dunwoody Pl	1 way	20	30	30	3.47	21.4	46	3	159.6	16.1
Local	150 PERI-	Dunwoody Pl to Dunwoody Sta	1 way	20	30	30	3.47	24.1	46	3	159.6	18.1
Local	41 WINDSOR	Brookhaven Sta to Lake Hearn	1 way	45	45	60	8.35	44.1	25	2	208.8	18.0
Local	41 WINDSOR-	Lake Hearn to Brookhaven Sta	1 way	45	45	60	8.35	43.1	25	2	208.8	17.6
Local	55ANDSP	Lindbergh Sta to Dunwoody Sta	1 way	8	16	30	12.16	68.5	89	17	1,079.2	100.2
Local	55ANDSP-	Dunwoody Sta to Lindbergh Sta	1 way	8	16	30	12.16	63.8	89	17	1,079.2	93.4
Local	85 HOLCOMB	N Spgs Sta to Holcomb Br Sta	1 way	60	60	60	10.00	46.7	20	2	200.0	15.2
Local	85 HOLCOMB-	Holcomb Br Sta to N Spgs Sta	1 way	60	60	60	9.87	58.8	20	2	197.4	19.1
Local	85 ROSEWL / A	N Spgs Sta to Alpharetta	1 way	30	60	60	12.75	56.3	26	5	331.5	23.9
Local	85 ROSEWL / A-	Alpharetta to N Spgs Sta	1 way	30	60	60	12.75	68.3	26	5	331.5	29.0
Local	87C ROSW	Dunwoody Sta to N Spgs Sta	1 way	12	24	30	13.90	64.2	63	11	868.8	65.8
Local	87C ROSW-	N Spgs Sta to Dunwoody Sta	1 way	12	24	30	13.90	68.5	63	11	868.8	70.2
Local	91 HENDERS	Brookhaven Sta to Doraville Sta	1 way	25	30	30	12.84	60.7	42	5	544.4	41.8
Local	91 HENDERS-	Doraville Sta to Brookhaven Sta	1 way	25	30	30	12.84	63.9	42	5	544.4	44.1
Local	140 HAYNES	N Spgs Sta to Alpharetta	1 way	10	15	60	12.24	42.7	77	9	942.5	54.4
Local	140 HAYNES-	Alpharetta to N Spgs Sta	1 way	10	15	60	12.24	43.8	77	9	942.5	55.9
Local	140 NORTH	N Spgs Sta to Windward P&R	1 way	10	15	60	15.30	54.8	77	12	1,178.1	69.8
Local	140 NORTH-	Windward P&R to N Spgs Sta	1 way	10	15	60	15.30	59.0	77	12	1,178.1	75.3
Local	CO 10 AR/	Arts Center Sta. to Marietta TC	1 way	15	30	60	16.25	51.5	47	8	763.8	39.9
Local	CO 10 MART	Marietta TC to Arts Center Sta	1 way	15	30	60	16.33	62.3	47	8	767.5	48.3
Local	CO 197	E Cobb to N Spgs Sta	1 way	20	30	30	14.78	84.0	46	7	679.9	63.0
Local	CO 197-	N Spgs Sta to E Cobb	1 way	20	30	30	14.78	57.9	46	7	679.9	43.4
Local	CO 20 SC	Marietta TC to Cumberland	1 way	60	60	0	10.60	51.0	15	2	159.0	12.8
Local	CO 20 SC-	Cumberland to Marietta TC	1 way	60	60	0	10.60	44.7	15	2	159.0	11.2
Local	CO 20 SOUT	Marietta TC to Home Depot	1 way	30	40	60	16.54	76.9	31	5	504.5	38.5
Local	CO 20 SOUT-	Home Depot to Marietta TC	1 way	30	40	60	16.54	74.6	31	5	504.5	37.3
Local	CO 202	W Cobb to Town Center Sta	1 way	20	30	30	11.87	70.7	46	6	546.0	53.0
Local	CO 202-	Town Center Sta to W Cobb	1 way	20	30	30	11.87	39.3	46	6	546.0	29.5
Local	CO 203	N Marietta to Wildwood	1 way	20	30	30	11.14	70.4	46	7	512.4	52.8
Local	CO 203-	Wildwood to N Marietta	1 way	20	30	30	11.34	54.4	46	7	521.6	40.8
Local	CO 207	W Cobb to Holcomb Br Sta	1 way	15	30	60	25.85	139.2	47	17	1,215.0	107.9
Local	CO 207-	Holcomb Br Sta to W Cobb	1 way	15	30	60	25.85	108.5	47	17	1,215.0	84.1
Local	CO 208	County Farm to N Spgs Sta	1 way	30	30	60	18.85	103.6	35	6	659.8	59.5
Local	CO 208-	N Spgs Sta to County Farm	1 way	30	30	60	18.85	79.9	35	6	659.8	46.0

Table 2.3-3

**Baseline Alternative – Average
Weekday Bus Operating Plan (cont.)**
**TABLE 2.3-3 (CONTINUED)
BASELINE ALTERNATIVE--AVERAGE WEEKDAY BUS OPERATING PLAN**

Type	Line ID	Route Pattern	Coding	Headways			Distance & Run Times		Daily Operating Statistics			
				Peak	Base	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Local	CO 209	Town Center Sta to Six Flags Sta	1 way	12	24	30	37.82	176.2	63	30	2,363.8	180.6
Local	CO 209-	Six Flags Sta to Town Center Sta	1 way	12	24	30	37.82	174.1	63	30	2,363.8	178.5
Local	CO 20A HIGHL	Cumberland to Highlands Pkwy	1 way	60	60	0	9.00	39.7	15	2	135.0	9.9
Local	CO 20A HIGHL-	Highlands Pkwy to Cumberland	1 way	60	60	0	9.00	46.8	15	2	135.0	11.7
Local	CO 210	Wade Green to Downtown Kennesaw	1 way	12	24	60	2.52	22.0	58	4	144.9	20.9
Local	CO 210-	Downtown Kennesaw to Wade Green	1 way	12	24	60	2.52	17.9	58	4	144.9	17.0
Local	CO 211	Acworth P&R to E Cobb	1 way	30	30	0	19.38	106.1	30	7	581.4	53.0
Local	CO 211-	E Cobb to Acworth P&R	1 way	30	30	0	19.38	84.7	30	7	581.4	42.4
Local	CO 212	Stilesboro Rd to Shallowford Rd	1 way	30	30	60	19.56	107.9	35	7	684.6	62.1
Local	CO 212-	Shallowford Rd to Stilesboro Rd	1 way	30	30	60	19.56	81.4	35	7	684.6	46.8
Local	CO 213	Powder Spgs to Cumberland Sta	1 way	5	16	30	10.96	74.4	116	24	1,268.6	142.3
Local	CO 213-	Cumberland Sta to Powder Spgs	1 way	5	16	30	10.96	45.4	116	24	1,268.6	86.7
Local	CO 214	Powder Spgs to Sandy Plains P&R	1 way	20	30	60	29.51	167.6	41	15	1,209.9	113.2
Local	CO 214-	Sandy Plains P&R to Powder Spgs	1 way	20	30	60	29.31	130.9	41	15	1,201.7	88.4
Local	CO 215	Villa Rica Rd to Trickum Rd	1 way	30	30	0	20.81	105.1	30	7	624.3	52.5
Local	CO 215-	Trickum Rd to Villa Rica Rd	1 way	30	30	0	20.81	86.3	30	7	624.3	43.1
Local	CO 217	Six Flags Sta to Wade Green Rd	1 way	15	30	60	27.43	129.5	47	18	1,289.2	100.3
Local	CO 217-	Wade Green Rd to Six Flags Sta	1 way	15	30	60	27.43	141.0	47	18	1,289.2	109.2
Local	CO 218	Elizabeth Sta to Austell	1 way	20	30	0	14.79	64.9	36	8	532.4	39.0
Local	CO 218-	Austell to Elizabeth Sta	1 way	20	30	0	14.79	79.2	36	8	532.4	47.5
Local	CO 45 BARR	Town Center to Marietta TC	1 way	60	60	0	17.64	82.7	15	3	264.6	24.0
Local	CO 45 BARR-	Marietta TC to Town Center	1 way	60	60	0	17.64	96.2	15	3	264.6	20.7
Local	CO 50 POWERS	Marietta TC to Cumberland	1 way	30	40	60	12.90	59.7	31	4	399.6	27.1
Local	CO 50 POWERS-	Cumberland to Marietta TC	1 way	30	40	60	13.10	54.1	31	4	399.6	27.1
Local	CO 60 JOHN	Marietta TC to Dunwoody Sta	1 way	90	90	0	16.48	81.9	10	2	164.8	13.7
Local	CO 60 JOHN-	Dunwoody Sta. To Marietta TC	1 way	90	90	0	16.48	70.8	10	2	164.8	11.8
Local	CO 65 ROSW	Marietta TC to Merchants Walk	1 way	60	60	0	8.08	34.5	15	2	121.2	8.6
Local	CO 65 ROSW-	Merchants Walk to Marietta TC	1 way	60	60	0	8.08	38.1	15	2	121.2	9.5
Local	CO 70 I-CUMB	Cumberland to Holmes Sta	1 way	60	60	0	12.50	38.8	15	2	187.5	9.7
Local	CO 70 O-CUMB	Holmes Sta to Cumberland	1 way	60	60	0	12.49	56.5	15	2	187.4	14.1
Local	GW 80DAC	Gwinnett Pl to Dacula CR Sta	2 way	30	30	0	20.44	66.4	60	3	1,226.4	66.4
Local	GW 85LIL-	Peachtree Corners to Lilburn CR Sta	1 way	30	30	0	11.81	65.8	30	4	354.3	32.9
Local	GW 85LIL	Lilburn CR Sta to Peachtree Corners	1 way	30	30	0	11.81	51.1	30	4	354.3	25.6
Local	GW 90SN	Gwinnett Pl to Snellville	2 way	30	30	0	14.02	55.7	60	2	841.2	55.7
Local	GW10 DV E	Gwinnett Pl to Doraville Sta	1 way	30	30	60	12.42	51.8	35	4	434.7	29.8
Local	GW10 DV E-	Doraville Sta to Gwinnett Pl	1 way	30	30	60	12.42	68.6	35	4	434.7	39.4
Local	GW10 DV W	Gwinnett Pl to Doraville Sta	1 way	30	30	60	13.31	72.9	35	5	465.9	41.9
Local	GW10 DV W-	Doraville Sta to Gwinnett Pl	1 way	30	30	60	13.31	54.2	35	5	465.9	31.2
Local	GW20 GWPL	Gwinnett Pl to Jimmy Carter Blvd	1 way	30	30	60	25.69	118.3	35	8	899.2	61.3
Local	GW20 GWPL-	Jimmy Carter Blvd to Gwinnett Pl	1 way	30	30	60	25.69	106.7	35	8	899.2	61.3
Local	GW30 TECH	Gwinnett Pl to Technology Park	2 way	30	30	60	19.60	103.5	70	4	1,372.0	119.0
Local	GW40 GWIN	Gwinnett Pl to Lawrenceville	1 way	30	30	60	18.18	70.6	35	5	636.3	40.6
Local	GW40 GWIN-	Lawrenceville to Gwinnett Pl	1 way	30	30	60	18.18	79.4	35	5	636.3	45.7
Local	GW50 BUF	Gwinnett Pl to Mall of Georgia	1 way	60	60	60	23.28	82.9	20	3	465.6	26.9
Local	GW50 BUF-	Mall of Georgia to Gwinnett Pl	1 way	60	60	60	23.28	95.0	20	3	465.6	30.9
Local	GW60 CENTER	Duluth to Centerville	1 way	60	60	60	23.07	100.8	20	4	461.4	32.7
Local	GW60 CENTER-	Centerville to Duluth	1 way	60	60	60	23.07	128.5	20	4	461.4	41.8
Local	GW70 LAW	Park Place to Mall of Georgia	1 way	60	60	60	24.60	90.0	20	3	492.0	29.2
Local	GW70 LAW-	Mall of Georgia to Park Place	1 way	60	60	60	24.60	85.2	20	3	492.0	27.7
Local	125CANTON	Canton to N Springs Sta	1 way	30	60	60	28.51	116.7	26	8	741.3	49.6
Local	125CANTON-	N Springs Sta to Canton	1 way	30	60	60	28.51	99.1	26	8	741.3	42.1

Table 2.3-3

Baseline Alternative - Average
Weekday Bus Operating Plan (cont.)

TABLE 2.3-3 (CONTINUED)
BASELINE ALTERNATIVE--AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Headways			Distance & Run Times		Daily Operating Statistics			
				Peak	Base	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Express	CO 101 A1	Marietta to Atlanta CBD	1 way	30	60	0	19.68	58.6	21		413.3	20.5
Express	CO 101 C1	Atlanta CBD to Marietta	1 way	30	60	0	19.22	60.7	21	6	403.6	21.2
Express	GR 94	Marietta to Gwinnett Pl	1 way	30	60	0	31.34	73.2	21	4	658.1	25.6
Express	GR 400	Cumming P&R to N Spgs Sta	1 way	30	60	0	21.83	65.0	21	4	458.4	22.7
Express	GR 401	SR400/SR 306 P&R to Perimeter Ctr	1 way	30	0	0	32.57	119.6	12	6	390.8	23.9
Express	GR 407	McFarland P&R to Cumberland Sta	1 way	30	0	0	27.32	114.0	12		327.8	22.8
Express	GR 407-	Cumberland Sta to McFarland P&R	1 way	30	0	0	27.32	116.2	12	8	327.8	23.2
Express	GR 408	SR 400/Old Atlanta P&R to Doraville Sta	1 way	30	60	0	28.30	133.0	21	7	594.3	46.6
Express	GR 409	N Spgs Sta to Doraville Sta	1 way	30	60	0	19.91	97.2	21		418.1	34.0
Express	GR 409-	Doraville Sta to N Spgs Sta	1 way	30	60	0	19.91	90.1	21	7	418.1	31.6
Express	GR 409B	Holcomb Br Sta to Doraville Sta	1 way	30	60	0	20.06	107.8	21		421.3	37.7
Express	GR 409B-	Doraville Sta to Holcomb Br Sta	1 way	30	60	0	20.06	115.6	21	8	421.3	40.5
Express	GR 410	Discover Mills to Lindbergh Sta	1 way	30	0	0	23.72	57.0	12		284.6	11.4
Express	GR 410-	Lindbergh Sta to Discover Mills	1 way	30	0	0	23.72	54.3	12	4	284.6	10.9
Express	GR 412	Discover Mills to Midtown	1 way	30	60	0	29.94	62.9	21	3	628.7	22.0
Express	GR 428	SE DeKalb to Perimeter Ctr	1 way	30	60	0	27.93	137.7	21		586.5	48.2
Express	GR 428-	Perimeter Ctr to SE DeKalb	1 way	30	60	0	27.93	134.6	21	9	586.5	47.1
Express	GR 467	Douglas County to Cumberland Sta	1 way	30	0	0	28.83	95.8	12		346.0	19.2
Express	GR 467-	Cumberland Sta to Douglas County	1 way	30	0	0	28.83	87.8	12	6	346.0	17.6
Express	GR 477	Dallas to Cumberland Sta	1 way	30	0	0	28.48	159.2	12		341.8	31.8
Express	GR 477-	Cumberland Sta to Dallas	1 way	30	0	0	28.48	92.4	12	9	341.8	18.5
Express	GR 480	Town Center P&R to Midtown	1 way	30	90	0	26.29	70.5	18	4	473.2	21.2
Express	GR 481	Acworth P&R to Midtown	1 way	30	0	0	32.62	87.6	12		391.4	17.5
Express	GR 481-	Midtown to Acworth P&R	1 way	30	0	0	32.62	88.1	12	6	391.4	17.6
Express	GR 485A	Cumberland Sta to Flat Shoals P&R	1 way	30	60	0	22.77	64.1	21		478.2	22.5
Express	GR 485B	Flat Shoals P&R to Cumberland Sta	1 way	30	60	0	22.19	84.6	21	6	466.0	29.6
Express	GW101A	I-985/SR 20 P&R to Atlanta CBD	1 way	30	60	0	40.00	96.9	21	6	840.0	33.9
Express	GW101B	Atlanta CBD to Mall of Georgia	1 way	30	60	0	40.30	80.3	21	6	846.3	28.1
Express	GW102A	I-85 Indian Trail PR to Atlanta CBD	1 way	30	0	0	38.05	123.8	12		456.6	24.8
Express	GW102B	Atlanta CBD to Gwinnett Pl	1 way	30	0	0	23.01	51.4	12	6	276.1	10.3
Express	GW103A	Discover Mills to Atlanta CBD	1 way	30	0	0	29.71	78.4	12		356.5	15.7
Express	GW103B	Atlanta CBD to Discover Mills	1 way	30	0	0	31.52	65.1	12	5	378.2	13.0
Express	CO 94	Marietta to Gwinnett Pl	1 way	30	60	0	30.79	53.7	21	3	646.6	18.8
Express	GR 413	Lawrenceville to Perimeter Ctr	1 way	30	0	0	24.96	50.1	12	3	299.5	10.0
Express	GR 483	Marietta to Perimeter Center	1 way	30	0	0	15.97	81.9	12	4	191.6	16.4
Express	GR 490	Canton P&R to Atlanta CBD	1 way	30	0	0	45.84	112.7	12	6	550.1	22.5
Express	GR 493	Towne Lake P&R to Perimeter Ctr	1 way	30	60	0	26.24	134.0	21	6	551.0	46.9
Express	GR 493-	Perimeter Ctr to Town Lake P&R	1 way	30	60	0	26.24	116.9	21	9	551.0	40.9
Express	GR 497	Towne Lake P&R to Cumberland Sta	1 way	30	60	0	22.44	76.0	21	4	471.2	26.6
TOTALS									4,481	473	75,526	5,446

3.0 ALTERNATIVE 1

Alternative 1 is the “Needs Based” alternative. Alternative 1 focuses on the objectives of improving system performance and addressing unmet needs in the ARC 2025 RTP Limited Update. Alternative 1 retains the 2025 land use distribution of households and employment in the ARC Regional Development Plan (adopted May 26, 1999). The Alternative 1 transportation network includes all 2025 RTP projects and adds RTP “illustrative” projects and “lessons learned” from Phase 1 of this NSAS/GA 400 Study. Currently, RTP “illustrative” projects are not officially part of the 2025 RTP Limited Update (adopted October 23, 2002), due either to insufficient funds available to include such a project in the financially constrained RTP or to a project concept requiring additional study.

3.1 Fixed Guideway Operations

Alternative 1 includes five fixed guideway projects. In addition to the three projects already included in the RTP, Alternative 1 adds the I-285 Fixed Guideway and the Northeast Fixed Guideway to address deficiencies in the I-285 and I-85 corridors of the Northern Sub-Area and provide high speed, high capacity transit choices. As proposed in the *ARC I-285 Corridor Transit Feasibility Study, January 2002*, the I-285 Fixed Guideway is assumed to be a 12.7-mile, ten-station project along the I-285 Corridor from the Cumberland station on the Northwest Fixed Guideway to the MARTA Doraville station. The I-285 Fixed Guideway would also provide across-platform transfers at the MARTA Dunwoody station on the North HRT Line. The Northeast Fixed Guideway is assumed to be a 13.1-mile, eight station project along the I-85 Corridor from the MARTA Doraville station to an end-of-line station at Discover Mills. Table 3.1-1 summarizes the Alternative 1 fixed guideway investments in the Northern Sub-Area.

Table 3.1-1 | Alternative 1 – Fixed Guideway Investments

Project Description	Source	ARC Number
Northwest Fixed Guideway, MARTA Arts Center Station to Town Center	2025 RTP Limited Update project	AR 251A, AR 251B, AR 251C
GA 400/North Line Extension, MARTA North Springs Station to Windward Station	2025 RTP Limited Update project	M-AR 234A, M-AR 234B, M-AR 234C
Cumberland People Mover	2025 RTP Limited Update project	AR 259A, AR 259B, AR 259C
I-285 Fixed Guideway, Cumberland Area to MARTA Doraville Station	RTP Illustrative project	AR 250
I-85 (Northeast) Fixed Guideway, MARTA Doraville Station to Discover Mills	Phase 1 Lessons Learned project	

3.1.1 Fixed Guideway Service Frequencies

The Alternative 1 transit operations plan assumes the following fixed guideway service frequencies (Table 3.1-2) in the Northern Sub-Area Study. This operating plan would have a combined service frequency of four minutes during the peak and base periods and eight minutes during the evening period on the Northwest Fixed Guideway between the Cumberland station and the Big Chicken station.

Table 3.1-2 | Alternative 1 – Fixed Guideway Service Frequencies

Fixed Guideway	Start/End Stations	Peak Headway	Base Headway	Evening Headway
Northwest	Town Center Station to MARTA Arts Center Station	8	8	10
GA 400/North Line Extension	MARTA North Springs Station to Windward Station	8	8	10
Northwest/I-285/I-85	Big Chicken Station to Discover Mills Station	8	8	10
Cumberland People Mover	Loop with 13 stops including Cumberland and Galleria stations	5	8	10

3.1.2 Stations

Station assumptions by guideway are summarized in Table 3.1-3. Stations in bold (for example, **Cumberland**) are stations that have service from more than one guideway. The fixed guideway operations plan assumes that the five existing and planned park-ride lots at I-75/Town Center, GA 400/Windward Parkway, GA 400/Old Milton Parkway, I-85/Indian Trail Road, and I-85/Discover Mills are converted to fixed guideway stations.

Table 3.1-3 | Alternative 1 – Station Locations

Northwest	400/North	Northwest/I-285/I-85
Town Center	GA 400/Northridge	Big Chicken
Elizabeth (Hwy 5)	GA 400/Holcomb Bridge	South Loop
Big Chicken	North Point Mall	Delk Road
South Loop	GA 400/Old Milton Parkway	Windy Hill
Delk Road	Windward	Cumberland
Windy Hill		Galleria
Cumberland		Powers Ferry
		Northside Drive
		Roswell Road
		GA 400/Hammond
		Dunwoody
		Perimeter East
		Shallowford
		Doraville
		Atlanta-DeKalb Industrial District
		Pleasantdale
		I-85/Jimmy Carter Blvd
		Indian Trail
		Beaver Ruin
		Steve Reynolds
		Old Norcross
		Discover Mills

3.2 Bus Operations

3.2.1 Non-Guideway Park-Ride Lots

Existing park-ride lots that are assumed to be used in conjunction with bus operations are located at:

- Canton (SR 5 Business north of Etowah River)
- GA 400 and Mansell Road
- I-985 and SR 20

Table 3.2-1 lists two currently authorized and nine additional Alternative 1 park-ride lot investments that would further facilitate transit travel and carpooling in the Northern Sub-Area. Current project status in the RTP and 2003-2005 Transportation Improvement Program (TIP) is listed also. The two newly proposed park-ride lots at SR 92/Sandy Plains Road and I-85/Hamilton Mill

Road were identified from “lessons learned” in Phase 1 of this NSAS/GA 400 Study. The search area locations for the park-ride lot investments generally provide auto intercept points at key arterials crossing I-75, I-575, GA 400, and I-85.

Table 3.2-1 | Alternative 1 – Park-Ride Lot Investments

ARC Number	Project Description	RTP/TIP Status
CO-AR-290	I-75 & Lake Acworth Drive/Cowan Road Park-Ride Lot	Authorized
AR-339B	SR 140 & SR 20 (Canton) Park-Ride Lot	RTP (2006-2010)
CH-AR-227	I-575 & Dupree Road Park-Ride Lot	RTP (2006-2010)
	SR 92 & Sandy Plains Road Park-Ride Lot	Proposed
AR-339A	GA 400 & McFarland Road Park-Ride Lot	2003-2005 TIP
AR-339A	GA 400 & SR 306 Park-Ride Lot	2003-2005 TIP
AR-339A	Downtown Cumming Park-Ride Lot	2003-2005 TIP
AR-339A	GA 400 & Old Atlanta Road Park-Ride Lot (incl. ramps to GA 400)	2003-2005 TIP
AR-339A	SR 141 & McGinnis Ferry Road Park-Ride Lot	2003-2005 TIP
	I-85 & Hamilton Mill Road Park-Ride Lot	Proposed
GW-AR-231	SR 316 & Collins Hill Road Park-Ride Lot	Authorized

3.2.2 Bus Route Operations (Modifications to the RTP Limited Update)

The Alternative 1 bus operating plans reflect refinements to the RTP network. Route changes can be categorized as follows:

- Select routes are modified to more effectively connect with stations on the Northwest and North fixed guideways, including the two new stations on the North Line. For example, RTP routes around the Town Center station are restructured to provide effective secondary distribution throughout the activity center.
- Route alignments are modified to connect to new stations on the added I-285 and I-85 fixed guideways.
- New local routes are added in underserved areas. New local service is provided on major arterials and connected to fixed guideway stations in most instances. Focus is toward providing adequate local service in areas between stations, as well as connecting outlying areas to stations.
- New circulator routes are added in major activity centers including Perimeter Center, North Point Mall, Towne Lake/Woodstock, Windward/McFarland, Canton, Cumming, and Gwinnett Place.

- Service on select routes or portions of routes are eliminated in instances where the service directly competes with the fixed guideways.
- Service frequencies are modified on several routes. Service frequencies are reduced on routes that parallel fixed guideways. Service frequencies are improved on routes that feed fixed guideway stations.
- New express routes are added that provide additional east-west service and radial service from new outlying park-ride lots.

Alternative 1 includes 69 local-service bus routes and 19 express-service bus routes in the Northern Sub-Area. The bus routes provide 2,324 route miles of service in the Northern Sub-Area. About 54 percent of Northern Sub-Area households and 68 percent of Northern Sub-Area jobs are within 0.4 mile of a transit station or stop (compared to 43 percent of households and 60 percent of jobs in the Baseline Alternative). The percent of commute trips that could use transit increases to 49 percent (compared to 39 percent in the Baseline Alternative).

The proposed route modifications are described below.

3.2.2.1 Local Service Routes

Cobb/Cherokee

Route CO 10 Cobb Parkway

This Cobb Community Transit (CCT) route presently provides local service on South Marietta Parkway and Cobb Parkway between the Marietta transit center and the Atlanta City Limits, and then operates closed-door via Northside Parkway and I-75 to the MARTA Arts Center station. Since this route would duplicate service on the Northwest Fixed Guideway, the routing is modified to provide local service along Cobb Parkway between the Big Chicken station and the Cumberland station. Headway is modified to 16-minute peak frequencies (RTP has 15).

Station Connections: Big Chicken, South Loop, Delk Road, Windy Hill, Cumberland

Route CO 15 Windy Hill Road

This CCT route presently provides service between the Marietta transit center and Wildwood Office Park via downtown Marietta, Powder Springs Road, Austell Road, and Windy Hill Road. The route is not in the RTP network, but is added back into Alternative 1 and modified on its east end to start from the Powers Ferry station and is extended north and west along Powers Ferry Road and the South Marietta Parkway to create a loop route with peak frequencies of 32 minutes in each direction.

Station Connections: Windy Hill, South Loop, Powers Ferry

Route CO 20 South Cobb Drive

This route builds on existing CCT route 20. The route starts at Cumberland station, runs west via Cumberland Boulevard, Spring Road, and Concord Road; north on South Cobb Parkway and Fairground Street; east on South Marietta Parkway; and then extends south on Franklin Road, east on Delk Road, south on Powers Ferry Road, and west on Terrell Mill Road to the Windy Hill station. Peak frequencies remain at 30 minutes.

Station Connections: Cumberland, South Loop, Windy Hill

Route CO 20A Highlands Parkway

This route builds on existing CCT route 20A. The route starts at Cumberland station, runs west via Cumberland Boulevard, Spring Road, and Concord Road; south on South Cobb Parkway; and ends in loop via Highlands Parkway, Highlands Ridge Road, and East-West Connector back to South Cobb Parkway. Headway is modified to 30-minute peak frequencies (RTP has 60).

Station Connection: Cumberland

Route CO 45 Barrett Parkway

This CCT route presently provides service between the Marietta transit center and Town Center mall. The route is modified on its north end to terminate at the Town Center station, via proposed I-75 crossing from Barrett Lakes Boulevard to George Busbee Parkway to the Town Center station. The south end of route is extended to the South Loop Station. Headway is modified to eight-minute peak frequencies (RTP has 60).

Station Connections: Town Center, Elizabeth (Hwy 5), South Loop

Route CO 50 Powers Ferry Road

Eliminate this existing CCT route.

Route CO 60 Johnson Ferry Road

Eliminate this existing CCT route.

Route CO 65 Roswell Road

Eliminate this existing CCT route.

Route CO 70 Cumberland/MARTA Holmes Station

This existing CCT route alignment is the same as in the RTP alternative. Peak frequencies remain at 60 minutes.

Station Connections: MARTA Holmes, Cumberland

Route CO 197

This RTP route serving the Johnson Ferry Road corridor is modified to include a stop at the SR 92/Sandy Plains Park-Ride lot and on south end of the route to tie into the MARTA Sandy Springs station via Johnson Ferry Road and Abernathy Road. Peak frequencies remain at 20 minutes.

Station Connection: MARTA Sandy Springs

Route CO 202

There is no change in alignment to this RTP route west of the Town Center station. The alignment is then extended east of the station on Barrett Parkway and Piedmont Road; north on Sandy Plains Road, east on Post Oak Tritt Road and Willeo Road, north on Coleman Road, Magnolia Road and Highway 9; and then east on Mansell Road to the North Point Mall station. Headway is modified to 30-minute peak frequencies (RTP has 20).

Station Connections: Town Center, North Point Mall

Route CO 203

This RTP route is modified on the east end of alignment to start from Powers Ferry station. Headway is modified to 24-minute peak frequencies (RTP has 20).

Station Connections: Elizabeth, Delk Road, Powers Ferry

Route CO 207

This RTP route serving the SR 120 corridor is modified to create a 207 and 207A route pattern. The 207 route pattern is the same as the one in the RTP network but with service extended to North Point Mall. Headway is modified to 16-minute peak frequencies (RTP has five). The 207A is a short turn, with service between the Big Chicken station and the North Point Mall station and is operated at 16-minute peak frequencies, to provide a combined eight minute peak frequency.

Station Connections: Big Chicken, GA 400/Holcomb Bridge, North Point Mall

Route CO 208

This RTP route is modified on its east end to feed to the MARTA Sandy Springs station via Johnson Ferry Road and Abernathy Road. Headway is modified to 24-minute peak frequencies (RTP has 30).

Station Connections: Big Chicken, MARTA Sandy Springs

Route CO 209

There is no change in alignment to this RTP route in south portion of route, but service is terminated at Cumberland. Peak frequencies remain at twelve minutes.

Station Connection: Cumberland

Route CO 210

This RTP route operates from Holmes MARTA station to downtown Kennesaw. The routing in the Study Area would be via I-285, South Cobb Parkway, Fairground Street, and Cobb Parkway to Elizabeth station. From the Elizabeth station the route is modified to run north on Bells Ferry Road, west on Chastain Road and south on George Busbee to the Town Center station. The route continues across I-75, north on Barrett Lakes Boulevard, and west on Chastain Road and Big Shanty Road to downtown Kennesaw. Headway is modified to 24-minute peak frequencies (RTP has 12).

Station Connections: MARTA Holmes, Elizabeth (Hwy 5), Town Center

Route CO 211

This RTP route starts at the Acworth Park-Ride lot at Lake Acworth Drive/Cowan Road, runs south on Cowan Road, east on Hickory Grove Road, and south on Wade Green Road. From Wade Green Road, the route runs east on Shiloh Road, south on Busbee Parkway, Frey Road, Chastain Road and Busbee Parkway to the Town Center station. From the Town Center station the RTP route is modified to run east on Earnest Barrett Parkway, north on Bells Ferry Road, east on Shallowford Road, Jamerson Road, Wigley Road, and north on Sandy Plains Road to the SR 92/Sandy Plains Park-Ride lot. Peak frequencies remain at 30 minutes.

Station Connection: Town Center

Route CO 212

This RTP route is modified on the east end of its alignment. The route is extended to follow Shallowford Road to Woodstock Road to SR 92, then east on SR 92 and Holcomb Bridge Road to the GA 400/Holcomb Bridge station. Peak frequencies remain at 30 minutes.

Station Connections: Elizabeth (Hwy 5), GA 400/Holcomb Bridge

Route CO 213

There is no change in alignment to this RTP route. Headway is modified to 30-minute peak frequencies (RTP has five).

Station Connection: Cumberland

Route CO 214

There is no change in alignment to this RTP route. The route connects to the SR 92/Sandy Plains Park-Ride lot. Headway is modified to 16-minute peak frequencies (RTP has 20).

Station Connection: Windy Hill

Route CO 215

There is no change in alignment to this RTP route, except on north end the route is extended north on Trickum Road to Arnold Mill Road. Peak frequencies remain at 30 minutes.

Station Connection: Town Center

Route CO 217

There is no change in alignment to this RTP route, except on north end the route is extended north on Wade Green Road and east on SR 92 to Trickum Road. Headway is modified to 30-minute peak frequencies (RTP has 15).

Station Connections: None

Route CO 218

This RTP route is modified on its north end to stop at the South Loop station and then terminate at the Big Chicken station. Headway is modified to 24-minute peak frequencies (RTP has 20).

Station Connections: South Loop, Big Chicken

Route 12 Howell Mill

This existing MARTA route is extended north on Cobb Parkway to the Cumberland station. Headway is modified to 16-minute peak frequencies (RTP has 20).

Station Connection: Cumberland

Route 125 Canton

Eliminate this route.

New Route TLC-A

Towne Lake Circulator A – This is a new route that starts at the Towne Lake Park-Ride lot at I-575 and Dupree Road, goes east on Towne Lake Parkway, south on Main Street and Canton Road, west on Jamerson Road and Shallowford Road, south on Bells Ferry Road and I-575 to the Town Center station. This route operates at 16-minute peak frequencies.

Station Connection: Town Center

New Route TLC-B

Towne Lake Circulator B – This a new route that starts at the Towne Lake Park-Ride lot at I-575 and Dupree Road, goes west on Towne Lake Parkway, south on Bells Ferry Road and I-575 to the Town Center station. This route operates at 16-minute peak frequencies.

Station Connection: Town Center

New Route Canton

Canton Road – This is a new route that starts in Canton and runs down Canton Road to the Elizabeth station. This route operates at 24-minute peak frequencies.

Station Connection: Elizabeth

New Route CantonCirc

Canton Circulator – This is a new Route that starts on Ball Ground Highway near the Northern Arc, runs south on Ball Ground Highway, SR 5 Business, south on Waleska Street through downtown Canton to the SR 140 and SR 20 (Canton) Park-Ride lot. The route then continues south on Old Marietta Road to Marietta Highway, east on Univeter Road, and north on SR 140 returning, to the Canton Park-Ride lot and downtown Canton, Waleska Street and SR 5 Business. This route operates at twelve minute peak frequencies.

Station Connections: None

New Route Acw-Kenn

Acworth/Kennesaw – This is a new route that starts in Acworth at North Main and the Bartow County line, runs south on North Main/Old Hwy 41 through downtown Kennesaw, continues south on Old Hwy 41 and Kennesaw Avenue to downtown Marietta, and then north on Hwy 5 to the Elizabeth station. This route operates at 30-minute frequencies.

Station Connection: Elizabeth

New Route CN-TL

Canton to Town Lake – This is a new route that starts at the SR 140 and SR 20 (Canton) Park-Ride lot, stops at the existing Canton Park-Ride lot, and goes south to the Towne Lake Park-Ride lot at I-575 and Dupree Road via Bells Ferry Road, Sixes Road, and Rope Mill Road. This route operates at 30-minute frequencies.

New Route SR140N

This is a new route that starts in Cherokee County at SR 140 and Batesville Road. The route follows SR 140 south, then Mansell Road to the east to the North Point Mall station. This route operates at 30-minute frequencies.

Station Connection: North Point Mall

North Fulton/Forsyth

Route 85 Holcomb

This existing MARTA route is modified to start at the GA 400/Northridge station and run north on Dunwoody Place and Hwy 9 through Roswell and Alpharetta. From downtown Alpharetta, the route would run east on SR 120, south on Kimball Bridge Road and North Point Parkway to the North Point Mall station. Headway is modified to 24-minute peak frequencies (RTP has 60).

Station Connections: GA 400/Northridge, North Point Mall

Route 85 Roswl/A

Eliminate route from network.

Route 140 North and Route 140 Haynes

These existing MARTA routes presently provide local service from Alpharetta and north Fulton County to the Mansell Park-Ride lot and then operate express to the MARTA North Springs station. Eliminate routes since they duplicate fixed guideway service. The local service segments of the route north of the fixed guideway are provided by proposed new routes NPCIRC, NES-RKR-135, WIND and WIND-MCF described below.

New Route CUM-WD

Cumming-Windward – This is a new route that starts in Cumming and follows Hwy 9 and Windward Parkway to the Windward station. This route operates at 24-minute peak frequencies.

Station Connection: Windward

New Route NPCIRC

North Point Circulator – This is a new route that starts at the GA 400/Old Milton Parkway station. The route runs south on North Point Parkway, west on Mansell Road, north on the Westside Parkway and east on Old Milton Parkway. Two-direction service would be provided. This route operates at eight minute peak frequencies.

Station Connections: GA 400/Old Milton Parkway, North Point Mall

New Route NES-RKR-135

This is a route that reflects an extension of MARTA's Route 135 to Nesbit Ferry Road and Rucker Road. Route 135 is extended north on Spalding Drive to SR 140, then west on SR 140 to Nesbit Ferry Road. From there, the route follows Nesbit Ferry Road, Old Alabama Road, Haynes Bridge Road, Mansell Road and North Point Parkway to the North Point Mall station. The route then continues north on North Point Parkway and Haynes Bridge Road to downtown Alpharetta. The route then continues west on Old Milton Parkway and Rucker Road, loops around Crabapple Road and Houze Road and back to Rucker Road. Headway is modified to 24-minute peak frequencies (RTP has 30).

Station Connections: MARTA Chamblee, Shallowford, North Point Mall

New Route CRB-BTH

Crabbapple-Bethany – This is a new route that starts at the GA 400/Holcomb Bridge station. The route runs west on Holcomb Bridge Road; south and west on Warsaw Road and Norcross Street; and north on Canton Street, Crabapple Road, Bethany Road, and Hopewell Road to Birmingham Road. This route operates at 24-minute peak frequencies.

Station Connection: GA 400/Holcomb Bridge

New Route WIND

Windward-North Point Mall – This is a new route that starts at the GA 400 and McFarland Road Park-Ride lot. The route runs south on McFarland Road, east on McGinnis Ferry Road, and west on Windward Parkway to the Windward station. The route then continues west on Windward Parkway; south on Hwy 9, Maxwell Road, and Westside Parkway; and east on Center Bridge Road to the North Point Mall station. This route operates at 16-minute peak frequencies.

Station Connections: Windward, North Point Mall

New Route WIND-MCF

Windward-McFarland Circulator – This is a new circulator route that starts at the GA 400 and McFarland Road park-ride lot. The route runs south on McFarland Road, west on McGinnis Ferry Road, and south on Windward Parkway to the Windward station. The route continues south on North Point Parkway, west on SR 120 to the GA 400/Old Milton Parkway station. The route then continues north on Westside Parkway, Deerfield Parkway, and Morris Road; east on McGinnis Ferry Road, north on Union Hill Road and south on McFarland Road; and returning to the GA 400 and McFarland Road Park-Ride lot. This route operates at 16-minute peak frequencies in both directions.

Station Connections: Windward, GA 400/Old Milton Parkway

New Route JBRDG

Jones Bridge Road – This is a new route that starts at the GA 400 and McFarland Road park-ride lot. The route runs south on McFarland Road and north on Old Alpharetta Road; south on Caney Road, Peachtree Parkway, and Jones Bridge Road; and west on Old Alabama Road to the GA 400/Holcomb Bridge station. This route operates at 24-minute peak frequencies.

Station Connection: GA 400/Holcomb Bridge

New Route SR 120

This is a new route that starts at the GA 400/Old Milton Parkway station and runs east on SR 120 to the Discover Mills station at I-85. This route operates at 24-minute peak frequencies.

Station Connections: GA 400/Old Milton Parkway, Discover Mills

New Route SB-PH

State Bridge-Pleasant Hill – This is a new route that starts at the GA 400/Old Milton Parkway station. The route runs east on SR 120, State Bridge Road, Pleasant Hill Road, and Satellite Boulevard to the Old Norcross station. This route operates at 30-minute peak frequencies.

Station Connections: GA 400/Old Milton Parkway, Old Norcross

New Route OALB

Old Alabama – This is a new route that starts at the SR 141 and McGinnis Ferry Road park-ride lot. The route runs south on SR 141 and west on Old Alabama Road to the GA 400/Holcomb Bridge station. This route operates at 24-minute peak frequencies.

Station Connection: GA 400/Holcomb Bridge

New Route CUMMCIRC

Cumming Circulator – This is a new circulator route that starts at SR 20 and Nuckolls Road. The route runs west on SR 20, north on Market Place Drive, west on Buford Dam Road, and north on Atlanta Road (Hwy 9) to circulate in downtown Cumming; then the route runs south on Castleberry Road, stopping at the downtown Cumming Park-Ride lot, east on Hutchinson Road, north on Hwy 9, and east on SR 20 returning to Nuckolls Road. This route operates at twelve minute peak frequencies, with two-direction service on the loop.

Station Connections: None

New Route WEB-KIM

Webb Bridge-Kimball Bridge roads – This is a new route that starts at the North Point Mall station and runs north on North Point Parkway; then east on Kimball Bridge Road and west on Webb Bridge Road and Academy Street; and then circulates through downtown Alpharetta. This route operates at 24-minute peak frequencies.

Station Connection: North Point Mall

I-285/Perimeter Center

Route 5 Sandy Springs

This existing MARTA route runs from the MARTA Lindbergh Center station to Sandy Springs via Piedmont Road and Roswell Road. The route is terminated on the north end at the Roswell Road station on the I-285 Fixed Guideway. Peak frequencies remain at eight minutes.

Station Connections: MARTA Lindbergh Center, Roswell Road

Route 41 Windsor Parkway

This existing MARTA route presently connects to the MARTA Medical Center station and serves the Lake Hearn office development area. A new Perimeter Center Circulator Route PC-2 (described below) would cover this part of the service area. On the north end of the route, the routing would be modified as follows: At Glenridge Drive and Johnson Ferry Road, the route runs north on the Glenridge Connector and Glenridge Drive, east on Hammond Drive, north on Barfield Road, and east on Mount Vernon Hwy to the MARTA Sandy Springs station. Headway is modified to 24-minute peak frequencies (RTP has 45).

Station Connections: MARTA Brookhaven, GA 400/Hammond, MARTA Sandy Springs

Route 87 Roswell Road

This existing MARTA route would be modified to begin at the GA 400/Holcomb Bridge station and run south on Dogwood Road, Riverside Road, and Roswell Road; then east on Hammond Drive to the MARTA Dunwoody station. Headway is modified to 16-minute peak frequencies (RTP has 12).

Station Connections: GA 400/Holcomb Bridge, Roswell Road, MARTA Dunwoody

Route 148 Powers Ferry

There is no change in alignment to this existing MARTA route; stops are added at stations on the I-285 Fixed Guideway. Headway is modified to 24-minute peak frequencies (RTP has 35).

Station Connections: Powers Ferry, Northside Drive, Roswell Road,
MARTA Sandy Springs

Route 150 Perimeter East/North River

This existing MARTA route would provide service on the west side of GA 400 on its north end as follows: from Dunwoody Village Parkway, the route runs north on Chamblee-Dunwoody Road, west on Spalding Drive and Dalrymple Road, north on Hwy 9, and east on Northridge Road to the GA 400/Northridge station. The route is also modified on its south end as follows: the route remains on Ashford-Dunwoody Road, then runs unchanged on Hammond Drive and Perimeter Center Parkway to the MARTA Dunwoody station. The existing service in the Perimeter Center East area would be covered by the new Perimeter Center Circulator Route PC-1 (described below). Headway is modified to 24-minute peak frequencies (RTP has 20).

Station Connections: MARTA Dunwoody, GA 400/Northridge

New Route PC1

Perimeter Center Circulator 1 – This new circulator route would operate as a two-way loop connecting the MARTA North Springs, Sandy Springs, and Dunwoody stations and the Perimeter East station on the I-285 Fixed Guideway. The route would circulate by developments in and along Peachtree Dunwoody Road, Perimeter Center West, Crown Pointe Parkway, Meadow Lane Road, Perimeter Center North, Perimeter Center East, Ravinia, Hammond Drive, Concourse, and Perimeter Center West. A short “bus access only” connecting road would be built between the Ravinia office development and the Perimeter Center East office development so that the buses would not have to turn around and go back out to Ashford-Dunwoody Road. Two-direction service would be provided. This route operates at eight minute peak frequencies.

Station Connections: MARTA Dunwoody, Sandy Springs, and North Springs; Perimeter East

New Route PC2

Perimeter Center Circulator 2 – This new circulator route would be anchored at the MARTA Medical Center station with two loops. The first loop would serve the Lake Hearn/Perimeter Summit developments via Lake Hearn Drive, Parkside Place, and Perimeter Summit Parkway. A second loop would serve the medical center area via Peachtree-Dunwoody Road, Hollis Cobb Circle, Johnson Ferry Road, Glenridge Connector and Peachtree-Dunwoody Road. Two-direction service would be provided. This route operates at eight minute peak frequencies.

Station Connection: MARTA Medical Center

Route 129 Chamblee-Dunwoody

This existing MARTA route is modified to provide a connection to the Shallowford station. Headway is modified to 24-minute peak frequencies (RTP has 40).

Station Connections: MARTA North Springs, Sandy Springs, and Chamblee; Shallowford

Route 132 Tilly Mill

This existing MARTA route is modified to provide a connection to the Shallowford station. Peak frequencies remain at 24 minutes.

Station Connections: Shallowford, MARTA Chamblee

Route 91 Henderson Mill

There is no change in alignment to this existing MARTA route; stop is added at the Atlanta-DeKalb Industrial District station (on McCall Drive) on the Northeast Fixed Guideway. Connect route to the Atlanta-DeKalb Industrial District station (on McCall Dr.) on the Northeast fixed guideway. Headway is modified to 24-minute peak frequencies (RTP has 25).

Station Connections: Atlanta-DeKalb Industrial District, MARTA Brookhaven and Doraville

Route 124 Chamblee-Tucker

There is no change in alignment to this existing MARTA route; stop is added at the Pleasantdale station on the Northeast Fixed Guideway. Headway is modified to 16-minute peak frequencies (RTP has 21).

Station Connections: Pleasantdale, MARTA Doraville and Chamblee

Gwinnett County

Route GW 10/10A

This existing Gwinnett County Transit (GCT) is extended to make connection to the Old Norcross station on the Northeast Fixed Guideway via Satellite Boulevard and Commerce Avenue. The routing otherwise stays the same as in RTP. Headway is modified to eight minute peak frequencies (RTP has 15).

Station Connections: MARTA Doraville, Old Norcross

Route GW 50

This existing GCT route is terminated at the Old Norcross station via Satellite Boulevard and Commerce Avenue. The routing otherwise stays the same as in RTP. The route also stops at the I-985/SR 20 Park-Ride lot. Headway is modified to 16-minute peak frequencies (RTP has 60).

Station Connection: Old Norcross

Route GW 20

This GCT route is modified in Alternative 1 to reflect the present alignment of the route as implemented in November 2002: west of Indian Trail Road/I-85, the route remains the same as coded in RTP, with connection to the I-85/Jimmy Carter Blvd station; east of Indian Trail Road/I-85, the route crosses to north side of I-85 and connects to the Indian Trail station, runs east on Beaver Ruin Road and connects to the Beaver Ruin station, and then continues east on Satellite Boulevard to the Old Norcross station. Headway is modified to 16-minute peak frequencies (RTP has 30).

Station Connections: I-85/Jimmy Carter Blvd., Indian Trail, Beaver Ruin, Old Norcross

Route GW 30

This existing GCT route is modified to operate from the Pleasantdale station to the Old Norcross station. The route starts at the Pleasantdale station; runs north on Northeast Expressway Access Road, Button Gwinnett Drive, Jones Mill Road, and Peachtree Corners Circle; then runs east on Spalding Drive, south on Medlock Bridge Road and Langford Road, west on Buford Hwy, east on Beaver Ruin Road, and south on Indian Trail Road connecting to the Indian Trail station; and then continues south on Indian Trail Road, east on Steve Reynolds Boulevard and Club Drive, north on Pleasant Hill Road, east on Breckinridge Boulevard, and north on Old Norcross Road to the Old Norcross station. Headway is modified to 16-minute peak frequencies (RTP has 30).

Station Connections: Pleasantdale, Indian Trail, Old Norcross

Route GW 40

There is no change in alignment to this existing GCT route which provides service between Gwinnett Place Mall, Discover Mills, and Lawrenceville; stops are added at the Old Norcross and Discover Mills stations. Headway is modified to 24-minute peak frequencies (RTP has 30).

Station Connections: Old Norcross, Discover Mills

Route GW 60

This planned GCT route from south Gwinnett to Duluth is modified from its RTP routing in the Gwinnett Place Mall area to connect to the Steve Reynolds station and remain on Steve Reynolds Boulevard west of the mall to Pleasant Hill Road, rather than deviating east to the mall. Otherwise, there is no change to RTP routing. Headway is modified to 30-minute peak frequencies (RTP has 60).

Station Connection: Steve Reynolds

Route GW 70

There is no change in alignment to this planned GCT route from the Mall of Georgia to Lawrenceville, and then to Snellville and Park Place via SR 20, SR 124, and Hwy 78. Headway is modified to 30-minute peak frequencies (RTP has 60).

Station Connections: None

Route GW 80

This planned route, included in the Gwinnett County Comprehensive Transportation Plan (CTP) and RTP, runs from Gwinnett Place Mall to the Dacula commuter rail station. The route is modified to begin at the Old Norcross station and provide connection at the Discover Mills station. Otherwise, there is no change to RTP routing. Peak frequencies remain at 30 minutes.

Station Connections: Old Norcross, Discover Mills, Dacula commuter rail

Route GW 85

This planned RTP route provides service between the Lilburn commuter rail station and Peachtree Corners. The alignment is modified to run from the Indian Trail station to the Lilburn commuter rail station via Indian Trail Road and Killian Hill Road. Peak frequencies remain at 30 minutes.

Station Connections: Indian Trail, Lilburn commuter rail

Route GW 90

This planned route, included in the Gwinnett County CTP and RTP, runs from Gwinnett Place Mall to the Ronald Reagan commuter rail station, and then to Snellville. The route is modified to begin at the Old Norcross station. Peak frequencies remain at 30 minutes.

Station Connections: Old Norcross, Ronald Reagan commuter rail

New Route GW 15

This planned route, included in the Gwinnett County CTP, is modified to start at the Discover Mills station and run to the Mall of Georgia via North Brown Road, Old Peachtree Road, Lawrenceville-Suwanee Road, Satellite Boulevard (and its planned extension to SR 20), and SR 20. The route also stops at the I-985/SR 20 park-ride lot. This route operates at 24-minute peak frequencies.

Station Connection: Discover Mills

New Route GW 25

This is a new route that starts at the Steve Reynolds station and runs to the Discover Mills station via north on Steve Reynolds Boulevard and Pleasant Hill Road, east on Buford Hwy, and south on Sugarloaf Parkway to the Discover Mills station. This route operates at 24-minute peak frequencies.

Station Connections: Steve Reynolds, Discover Mills

New Route PIB

Peachtree Industrial Boulevard – This is a new route beginning at the Doraville station. The route runs north on New Peachtree Road, Winters Chapel Road, and Peachtree Industrial Boulevard (PIB), east on Pleasant Hill Road, and returns to PIB via Howell Ferry Road. This route operates at 24-minute peak frequencies.

Station Connection: Doraville

New Route AMWSPAL

Amwiler-Spalding – This is a new route from the Pleasantdale station to Peachtree Corners. The route runs north on Pleasantdale Road, Amwiler Road, and Winters Chapel Road, and east on Spalding Drive, looping back via Medlock Bridge Road, Peachtree Corners Circle, and Peachtree Parkway. This route operates at 24-minute peak frequencies.

Station Connection: Pleasantdale

New Route LCIGWNT

LCI Gwinnett Circulator – This is a new route, identified as part of a Livable Centers' Initiative (LCI) study undertaken by Gwinnett County for this major activity center, which provides circulator service in the Gwinnett Place Mall and Discover Mills area. Starting at Steve Reynolds Boulevard, the route runs east and north on the east side of I-85 via Club Drive, Sweetwater Road, Old Norcross Road, and Breckenridge Boulevard to Discover Mills. The route crosses I-85 on Sugarloaf Parkway, then runs on the west side of I-85 via Satellite Boulevard, Commerce Avenue, Ring Road, Venture Parkway, Pleasant Hill Road, Satellite Boulevard, and returns to Steve Reynolds Boulevard. Two-direction service would be provided. This route operates at eight minute peak frequencies.

Station Connections: Discover Mills, Old Norcross, Steve Reynolds

3.2.2.2 Express Service Routes

Route GR 400

This planned RTAP express route provides peak period and midday service in both directions (the RTP models peak period, peak direction service only). The RTP alignment is modified to feed the North Point Mall station from two

planned park-ride lots in Cumming/central Forsyth County. In the a.m. peak direction, the route starts at the downtown Cumming park-ride lot and runs south on Castleberry Road, east on Hutchinson Road (Hutchinson Road is being upgraded and realigned to intersect Hwy 9 at Old Atlanta Road), and east on Old Atlanta Road to the GA 400 and Old Atlanta Road park-ride lot. The route then accesses GA 400 and runs express to the North Point Mall station using planned HOV ramps at Center Bridge Road. In the reverse commute direction, the route will run from the North Point Mall station north on GA 400 to the SR 20 interchange, east on SR 20, north on Market Place Drive, west on Buford Dam Road, and north on Hwy 9 to downtown Cumming. Peak frequencies remain at 30 minutes.

There is no access to GA 400 at Old Atlanta Road. However, this could be a candidate site for future HOV access ramps if HOV lanes are extended to Cumming from the current planned end at McFarland Road. For the interim operation, it may be possible to provide temporary half-diamond ramps on the south side of the Old Atlanta Road overpass as part of the GA 400 and Old Atlanta park-ride lot project.

Station Connection: North Point Mall

Route GR 401

This planned RTAP express route provides peak period, peak direction service only. The RTP alignment is modified to feed the North Point Mall station from a planned park-ride lot in north Forsyth County to the North Point Mall station. The route starts at the GA 400 & SR 306 Park-Ride lot and runs express via GA 400 to the North Point Mall station using planned HOV ramps at Center Bridge Road. Peak frequencies remain at 30 minutes.

Station Connection: North Point Mall

Route GR 407

This planned RTAP express route provides peak period, peak direction service only from the GA 400 and McFarland Road park-ride lot to the MARTA North Springs station and the Cumberland station (the RTP models service in both directions). Eliminate route since it duplicates fixed guideway service. The route segment from McFarland Road to the fixed guideway is provided by proposed new routes WIND and WIND-MCF described above.

Route GR 408

This planned RTAP limited stop, arterial route provides peak period and midday service in both directions in the SR 141 corridor from Cumming at the GA 400 and Old Atlanta Road park-ride lot to the MARTA Doraville station (the RTP and Alternative 1 model peak direction service only). Stops should be one-half to one mile apart including intermediate park-ride lot locations at SR 141 and

McGinnis Ferry Road, Abbotts Bridge Road, State Bridge Road, Peachtree Corners Circle, and Holcomb Bridge Road. The route continues south via Peachtree Industrial Boulevard, Winters Chapel Road, Oakcliff Road, and New Peachtree Road, ending at the MARTA Doraville station. There is no change to RTP routing. Peak frequencies remain at 30 minutes.

Station Connection: MARTA Doraville

Route GR 409

This planned RTAP limited stop, arterial route provides peak period and midday service in both directions in the Holcomb Bridge Road corridor. Several neighborhood-scale park-ride lots are planned (either new construction or lease existing lots) at key intersections along Holcomb Bridge Road. Stops should be one-half to one mile apart. The RTP alignment is modified to begin at the GA400/Holcomb Bridge station and follow SR 140 to the I-85/Jimmy Carter Blvd station. Headway is modified to 30-minute peak frequencies (RTP has 15).

Station Connections: GA 400/Holcomb Bridge, I-85/Jimmy Carter Blvd.

Route GR 410

This planned RTAP express route is modified in Alternative 1 to provide peak period, peak direction service only (the RTP models service in both directions). The route operates from Discover Mills to the MARTA Lindbergh station via Sugarloaf Parkway, I-85 HOV lanes, and Lindbergh Drive. The RTP alignment is modified to begin at the Discover Mills station. Peak frequencies remain at 30 minutes.

Station Connections: Discover Mills, MARTA Lindbergh

Route GR 412

This planned RTAP express route provides peak period, peak direction service only from Discover Mills to Midtown Atlanta (the RTP also assumes midday service). Eliminate route since it duplicates fixed guideway service.

Route GR 413

This planned RTAP express route provides peak period, peak direction service only from Lawrenceville to Perimeter Center. Eliminate route since it duplicates fixed guideway service. The Lawrenceville to Discover Mills segment of route is provided by proposed new routes CH/OMP and CDRS/DM described below.

Route GR 428

This planned RTAP express route provides peak period, peak direction service only from a proposed park-ride lot at I-20 and Miller Road in southeast DeKalb County to Perimeter Center (the RTP and Alternative 1 model service in both directions). The routing would access I-20 HOV lanes at I-20/Miller Road HOV

ramps, and proceed to the Perimeter Center area via I-20 and I-285 HOV lanes, and I-285/Perimeter Center Parkway HOV ramps. An intermediate stop would be made at the MARTA Indian Creek station. Peak frequencies remain at 30 minutes.

Station Connections: MARTA Dunwoody, MARTA Indian Creek

Route GR 467

This planned RTAP express route provides peak period, peak direction service only from the Douglasville multi-modal terminal to the Cumberland station via I-20, I-285, Paces Ferry Road, Cumberland Parkway, and Cumberland Boulevard (the RTP models service in both directions). The RTP alignment is modified to extend the route from the Cumberland station to the Galleria station via Akers Mill Road and Galleria Drive. Peak frequencies remain at 30 minutes.

Station Connections: Cumberland, Galleria

Route GR 477

This planned RTAP express route provides peak period, peak direction service only (the RTP models service in both directions). The route operates from an existing park-ride lot in Dallas and planned RTAP park-ride lots in east Paulding County and Powder Springs via Hwy 278 and the East-West Connector. The RTP alignment is modified to extend the route from the Cumberland station to the Galleria station via Akers Mill Road and Galleria Drive. Peak frequencies remain at 30 minutes.

Station Connections: Cumberland, Galleria

Route GR 480

This planned RTAP express route provides peak period and midday service in both directions from Town Center to Midtown (the RTP models peak direction service only). Eliminate route since it duplicates fixed guideway service.

Route GR 481

This planned RTAP express route provides peak period, peak direction service only from Acworth to Midtown (the RTP models service in both directions). Eliminate route since it duplicates fixed guideway service. The Acworth to Town Center segment of route is provided by modified route CO 211 described above.

Route GR 483

This planned RTAP limited stop, arterial route provides peak period and midday service in both directions from Marietta to Perimeter Center via SR 120 and Johnson Ferry Road (the RTP models peak period, peak direction service only). Eliminate route since it duplicates fixed guideway service. The local stop service

continues to be provided by routes CO 208 and CO 197 on SR 120 and Johnson Ferry Road described above.

Route GR 485

This planned RTAP express route provides peak period and midday service in both directions. The route operates from Cumberland to Hartsfield via I-285 and then continues to the existing MARTA Flat Shoals park-ride lot in south Fulton County. There is no change to RTP routing. Peak frequencies remain at 30 minutes.

Station Connections: Cumberland

Route GR 490

This planned RTAP express route provides peak period, peak direction service only. The RTP alignment is modified to feed the Town Center station from the planned SR 140 and SR 20 (Canton) park-ride lot. The route uses the planned I-575 HOV lanes and accesses the Town Center area via planned HOV ramps at I-575 and Big Shanty Road. The RTP interim stop at the Towne Lake park-ride lot at I-575 and Dupree Road is eliminated. The Towne Lake Park-Ride lot express service is provided by modified route GR 497 described below. Peak frequencies remain at 30 minutes.

Station Connections: Town Center

Route GR 493

This planned RTAP limited-stop arterial route provides peak period and midday service in both directions in the SR 92 corridor. Stops are one-half to one mile apart. The route begins at the Towne Lake Park-Ride lot at I-575 and Dupree Road and runs east on SR 92 and Mansell Road stopping at the planned SR 92 and Sandy Plains Road park-ride lot and the existing Mansell Road Park-Ride lot. From the Mansell Road park-ride lot, the RTP alignment is modified to continue east on Mansell Road and north on North Point Parkway to the North Point Mall station. Peak frequencies remain at 30 minutes.

Station Connections: North Point Mall

Route GR 497

This planned RTAP express route provides peak period and midday service in both directions (the RTP and Alternative 1 model peak direction service only). The RTP alignment is modified to feed the Town Center station from the planned Towne Lake park-ride lot at I-575 and Dupree Road. The route uses the planned I-575 HOV lanes and accesses the Town Center area via planned HOV ramps at I-575 and Big Shanty Road. Peak frequencies remain at 30 minutes.

Station Connections: Town Center

Route GR 94/CO 94

This RTP route pair provides peak period and midday service in both directions from Marietta to Perimeter Center to Gwinnett Place. Eliminate route pair since it duplicates fixed guideway service.

Route CO 101

This existing CCT route provides peak period service in both directions from Marietta to downtown Atlanta. The P.M. peak service runs from midtown and downtown Atlanta to Marietta. The reverse commute service runs from midtown and downtown Atlanta to Cumberland and the Wildwood activity centers. In the RTP, midday service in both directions is added. Eliminate route since it duplicates fixed guideway service.

Route GW 101

This existing GCT route provides peak period service in both directions from the I-985 and SR 20 park-ride lot to downtown Atlanta. The reverse commute service runs from midtown and downtown Atlanta to the Mall of Georgia. In the RTP and Alternative 1, midday service in both directions is added. For peak direction service, headway is modified to 15-minute peak frequencies (RTP has 30). Reverse commute frequencies remain at 30 minutes.

Station Connections: downtown Atlanta – Peachtree Center and Five Points; midtown Atlanta – Civic Center, North Avenue, Midtown, and Arts Center

Route GW 102

This existing GCT route provides peak period service in both directions from the Indian Trail park-ride lot to downtown Atlanta. The reverse commute service runs from midtown and downtown Atlanta to Gwinnett Place Mall. Eliminate route since duplicates fixed guideway service.

Route GW 103

This existing GCT route provides peak period service in both directions from Discover Mills to downtown Atlanta. The reverse commute service runs from midtown and downtown Atlanta to Discover Mills. The RTP alignment is modified to change routing in midtown Atlanta to access midtown and the MARTA Arts Center station via the proposed HOV ramps at 17th Street, and then travel south on Peachtree Street where the route would follow the existing downtown routing. Peak frequencies remain at 30 minutes.

Station Connections: Discover Mills; downtown Atlanta – Peachtree Center and Five Points; midtown Atlanta – Civic Center, North Avenue, Midtown, and Arts Center

New Route CH/OMP

Collins Hill/Old Milton Parkway – This is a new express route providing peak period service in both directions from the planned SR 316 and Collins Hill Road park-ride lot to the GA 400/Old Milton Parkway station. The route begins at Collins Hill Road and runs on SR 316 HOV lanes and Sugarloaf Parkway, stopping at the Discover Mills station. The route then runs on Satellite Boulevard, Pleasant Hill Road, State Bridge Road, and Old Milton Parkway. This route operates at 30-minute peak frequencies.

Station Connections: Discover Mills, GA 400/Old Milton Parkway

New Route HM/DM

Hamilton Mill/Discover Mills – This is a new express route providing peak period, peak direction service only from the planned I-85 and Hamilton Mill Road park-ride lot to the Discover Mills station via the I-85 HOV lanes. This route operates at 30-minute peak frequencies.

Station Connections: Discover Mills

New Route CDRS/DM

Cedars/Discover Mills – This is a new express route providing peak period, peak direction service only from the commuter rail station at SR 316 and Cedars Road to the Discover Mills station via SR 316 HOV lanes and Sugarloaf Parkway. This route operates at 30-minute peak frequencies.

Station Connections: Dacula commuter rail station at Cedars Road,
Discover Mills

New Route TL/OMP

Towne Lake/Old Milton Parkway – This is a new express route providing peak period, peak direction service only from the Towne Lake Park-Ride lot at I-575 and Dupree Road to the GA 400/Old Milton Parkway station via SR 92, the proposed SR 92/SR 120 Connector, and SR 120. An intermediate stop would be made at the planned SR 92 and Sandy Plains Road park-ride lot. This route operates at 30-minute peak frequencies.

Station Connections: GA 400/Old Milton Parkway

New Route TC/OMP

Town Center/Old Milton Parkway – This is a new express route providing peak period service in both directions from the Town Center station to the GA 400/Old Milton Parkway station via I-575 HOV lanes, SR 92, the proposed SR 92/SR 120 Connector, and SR 120. An intermediate stop would be made at the planned SR 92 and Sandy Plains Road park-ride lot. This route operates at 30-minute peak frequencies.

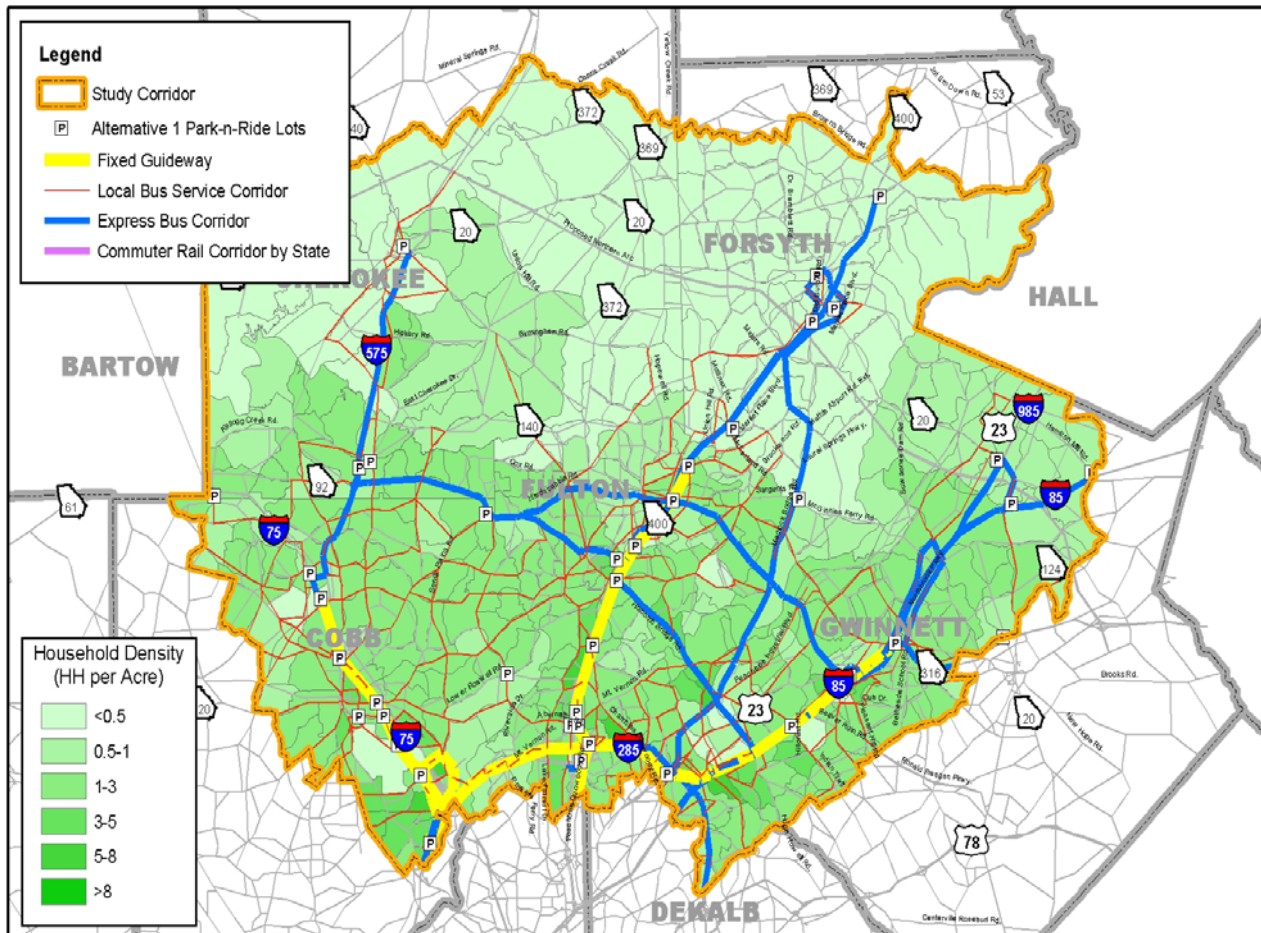
Station Connections: Town Center, GA 400/Old Milton Parkway

Two figures follow that illustrate the fixed guideway, express bus, and local bus corridors defined for Alternative 1 mapped on the household and employment densities assumed in the 2025 Regional Development Plan (adopted May 26, 1999).

3.3 Operating Plan Results

Based on the model run, Alternative 1 results in 251,850 daily transit trips being made within, into, or from the Northern Sub-Area. With Transportation Demand Management (TDM) Level 1 measures included in the model run, there are about 247,600 daily transit trips. Both results represent substantial growth over the 188,100 daily transit trips in the Baseline Alternative. Focusing on commute trips, the transit share of work trip productions is 11.3 percent, an increase of approximately 50 percent. And there is a 5.3 percent reduction in average transit travel time per commute trip. In Alternative 1, the commute transit trip results are approximately the same both with and without the TDM measures.

Since the fixed guideways operate as a regional system, the fixed guideway operating plans for each alternative include the operating statistics for the entire region. However, Table 2.3-1 is provided as a “pivot point” operating plan for all alternatives so that the incremental operating statistics attributable to each alternative’s Northern Sub-Area fixed guideways can be easily calculated, if desired. Table 2.3-1 presents 2025 fixed guideway operating statistics for the RTP Limited Update fixed guideways, **excluding the Northwest LRT Line, the North Line extension to Windward Parkway, and the Cumberland People Mover**. In Section 6, this “pivot point” approach is also used in estimating the operating and maintenance (O&M) cost results for fixed guideways attributable only to the Northern Sub-Area. Note that by excluding the entire Northwest LRT line in the “pivot point” table, the Arts Center station to Cumberland station segment is also attributed to the Northern Sub-Area. This is done as there is no effective way to break out the operating statistics of a line segment. Since the Northwest LRT line is assumed in all alternatives, it does not affect the operating characteristics and O&M costs comparisons across the alternatives.



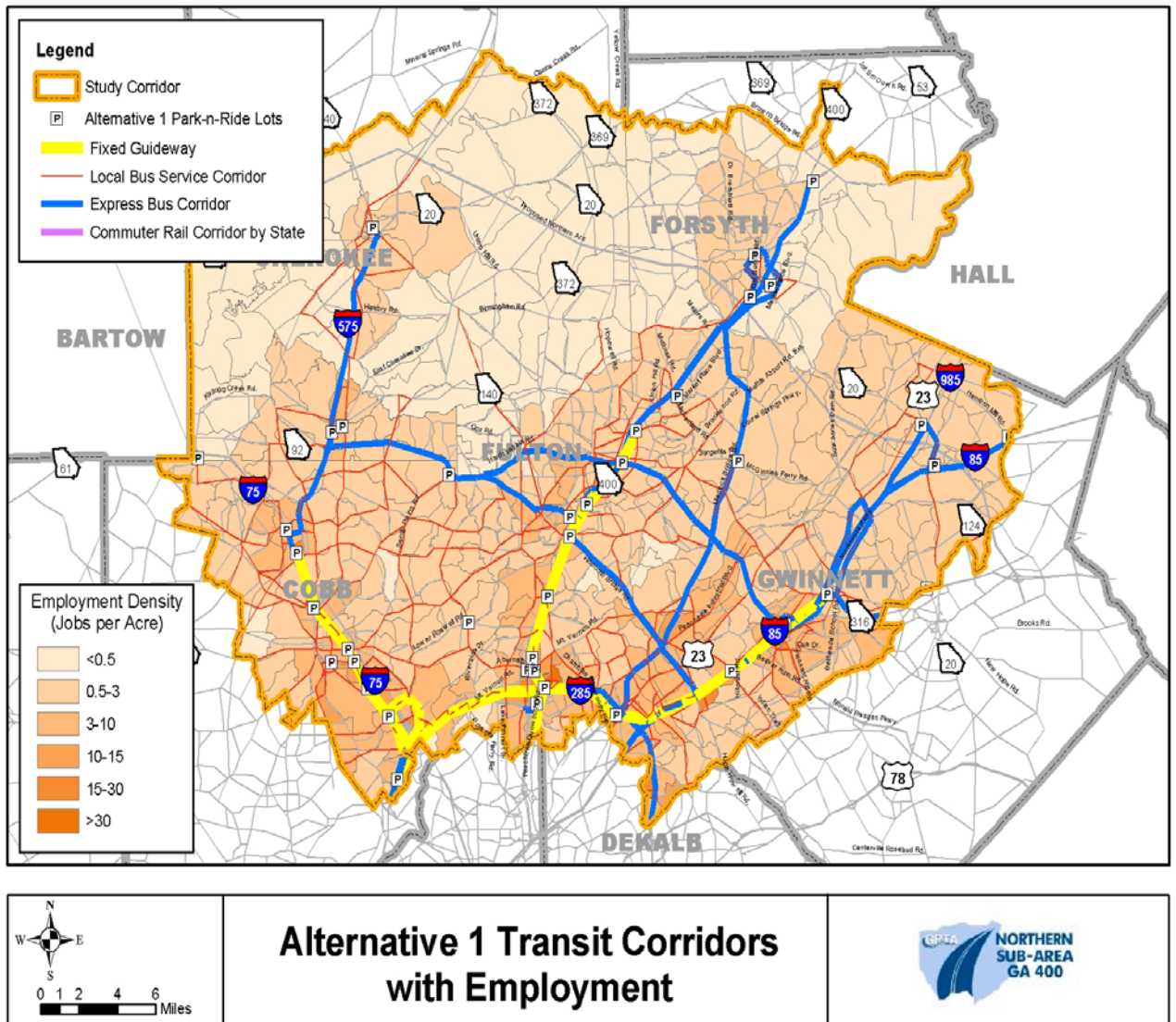


Table 3.3-1 presents the 2025 fixed guideway operating statistics for the RTP fixed guideway system and the increments attributed to Alternative 1. The operating requirements attributed to Alternative 1 for HRT are 29 cars, 7.12 million annual revenue car-miles, and 24,300 annual train-hours; for LRT, 48 cars, 6.49 million annual revenue car-miles, and 59,500 annual train-hours; for BRT, 90 buses, 11.37 million annual bus-miles, and 370,500 annual bus-hours; and for Circulators, 12 cars, 720,000 annual revenue car-miles, and 43,200 annual car-hours.

Table 3.3-2 presents the 2025 weekday bus operations plan for Alternative 1. This table lists the peak, base, and late evening service levels assumed in Alternative 1. The bus operations plan requires 587 peak buses and provides 106,936 daily bus-miles and 7,620 daily bus-hours of service.

Table 3.3-1 Alternative 1 – Fixed Guideway
Operating Plan

2025 HRT Operating Plan

From		To		Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
						Peak	base	Sat/ev	date/Sun	Peak	base	Sat/ev	date/Sun	Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)
North-South Line																	
Doraville		Airport		40.0	22.2	8	8	10	15	8	8	6	4	96	116	13.63	72.0
Windward Parkway		Airport		57.0	35.7	8	8	10	15	8	8	6	4	128	154	20.41	97.7
Windward Parkway		Lindbergh		31.0	21.6				15				4			0.91	11.0
Trunk Average/Total:						4	4	5	8					224	270	34.95	180.7
East-West Line																	
Hightower		Indian Creek		29.0	14.9	8	8	10	15	6	6	5	4	54	65	7.27	54.3
Bankhead		King Mem		10.0	4.1	8	8	10	15	2	2	2	2	8	10	0.74	23.5
Trunk Average/Total:						4	4	5	8					62	75	8.01	77.8
TOTALS														286	345	42.95	258.5
HRT Attributed to Alternative 1														24	29	7.12	24.3

2025 LRT Operating Plan

2025 LRT Operating Plan															
From	To	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
				Peak	Base	Sat/eve	late/Sun	Peak	Base	Sat/eve	late/Sun	Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)
DeKalb LRT															
Lindbergh	South DeKalb	28.0	12.4	8	8	10	15	3	2	2	2	27	33	2.57	54.3
Northwest LRT															
Arts Center	Town Center	31.3	21.8	8	8	10	15	4	3	3	3	40	48	6.49	59.5
TOTALS												67	81	9.06	113.8
LRT Attributed to Alternative 1												40	48	6.49	59.5

2025 BRT Operating Plan

2025 BRT Operating Plan															
From	To	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
				Peak	Base	Sat/eve	late/Sun	Peak	Base	Sat/eve	late/Sun	Peak	Total	Bus-Mi. (million)	Bus-Hrs. (thous.)
I-285 BRT															
Big Chicken	Discover Mills	52.0	30.7	8	8	10	15	5	4	4	3	75	90	11.37	370.5
TOTALS												75	90	11.37	370.5
BRT Attributed to Alternative 1												75	90	11.37	370.5

2025 Fixed Route Circulator Operating Plan

	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
			Peak	Base	Sat/eve	late/Sun	Peak	Base	Sat/eve	late/Sun	Peak	Total	Car-Mi. (million)	Car-Hrs. (thous.)
Cumberland Circulator	16.5	6.8	5	8	10	15	1	1	1	1	10	12	0.72	43.2
TOTALS											10	12	0.72	43.2
Circulator Attributed to Alternative 1											10	12	0.72	43.2

Note 1: Ten-minute peak frequencies were modeled for the heavy rail lines, per the current RTP. However, to accommodate load projections on the North and Northeast lines with 8-car trains, 8-minute peak frequencies on all heavy rail lines were assumed for the operating plans.

Note 2: Ten-minute peak frequencies were modeled for the Lindbergh-South DeKalb light rail line, per the current RTP. However, for consistency with the heavy and light rail line frequencies, 8-minute peak frequencies were assumed for the operating plans.

Table 3.3-2

Alternative 1 – Average Weekday Bus Operating Plan

TABLE 3.3-2
ALTERNATIVE 1–AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Base	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Local	12 HOWEL	Midtown Sta to Cumberland Sta	1 way	Modified	16	24	30	10.70	59.3	55	8	588.5	53.3
Local	12 HOWEL-	Cumberland Sta to Midtown Sta	1 way	Modified	16	24	30	10.70	58.6	55	8	588.5	52.7
Local	124 CHAMB	Chamblee Sta to Tucker	1 way	Modified	16	24	30	10.08	57.9	55	7	554.4	52.1
Local	124 CHAMB-	Tucker to Chamblee Sta	1 way	Modified	16	24	30	10.08	41.4	55	7	554.4	37.3
Local	129 CHAMB	Chamblee Sta to N Spgs Sta	1 way	Modified	24	24	30	10.02	55.1	48	5	476.0	42.7
Local	129 CHAMB-	N Spgs Sta to Chamblee Sta	1 way	Modified	24	24	30	10.02	53.5	48	5	476.0	41.5
Local	132 TILL	Chamblee Sta to Tilly Mill	1 way	Modified	24	24	30	7.47	35.1	48	4	354.8	27.2
Local	132 TILL-	Tilly Mill to Chamblee Sta	1 way	Modified	24	24	30	7.47	44.3	48	4	354.8	34.3
Local	135 NIS-RKR	Chamblee Sta to N Point Sta	1 way	Modified	24	24	30	27.33	113.1	48	10	1,298.2	87.7
Local	135 NIS-RKR-	N Point Sta to Chamblee Sta	1 way	Modified	24	24	30	27.15	127.4	48	10	1,289.6	98.7
Local	148 POWER	Sandy Spgs Sta to Powers Ferry Sta	1 way	Modified	24	24	30	7.49	38.2	48	4	355.8	29.6
Local	148 POWER-	Powers Ferry Sta to Sandy Spgs Sta	1 way	Modified	24	24	30	7.49	43.1	48	4	355.8	33.4
Local	150 PERI	Dunwoody Sta to Northridge Sta	1 way	Modified	24	24	30	8.18	41.0	48	4	388.6	31.8
Local	150 PERI-	Northridge Sta to Dunwoody Sta	1 way	Modified	24	24	30	8.18	45.5	48	4	388.6	35.3
Local	41 WINDSOR	Brookhaven Sta to Sandy Spgs Sta	1 way	Modified	24	24	30	7.57	45.3	48	4	359.6	35.1
Local	41 WINDSOR-	Sandy Spgs Sta to Brookhaven Sta	1 way	Modified	24	24	30	7.57	40.0	48	4	359.6	31.0
Local	55 SANDSP	Lindbergh Sta to Roswell Rd Sta	1 way	Modified	8	16	30	7.72	48.7	89	12	685.2	71.2
Local	55 SANDSP-	Roswell Rd Sta to Lindbergh Sta	1 way	Modified	8	16	30	7.72	41.7	89	12	685.2	61.0
Local	85 HOL-COMB	Northridge Sta to N Point Sta	1 way	Modified	24	24	30	13.39	60.0	48	6	636.0	46.5
Local	85 HOL-COMB-	N Point Sta to Northridge Sta	1 way	Modified	24	24	30	13.39	68.2	48	6	636.0	52.9
Local	87C ROSW	Holcomb Br Sta to Dunwoody Sta	1 way	Modified	16	24	30	14.38	63.0	55	9	790.9	56.7
Local	87C ROSW-	Dunwoody Sta to Holcomb Br Sta	1 way	Modified	16	24	30	14.38	73.2	55	9	790.9	65.9
Local	91 HENDERS	Brookhaven Sta to Doraville Sta	1 way	Modified	24	24	30	12.84	60.3	48	6	609.9	46.8
Local	91 HENDERS-	Doraville Sta to Brookhaven Sta	1 way	Modified	24	24	30	12.84	73.8	48	6	609.9	57.2
Local	PC1	Perimeter Center	1 way	Added	8	16	30	4.17	23.5	89	6	370.1	34.4
Local	PC1-	Perimeter Center	1 way	Added	8	16	30	4.17	23.3	89	6	370.1	34.1
Local	PC2	Perimeter Center	1 way	Added	8	16	30	4.22	24.5	89	6	374.5	35.9
Local	PC2-	Perimeter Center	1 way	Added	8	16	30	4.22	24.4	89	6	374.5	35.7
Local	CO 10 AR/	Big Chicken Sta to Cumberland Sta	1 way	Modified	16	24	30	6.97	30.4	55	4	383.4	27.3
Local	CO 10 MART	Cumberland Sta to Big Chicken Sta	1 way	Modified	16	24	30	6.96	33.5	55	4	382.8	30.1
Local	CO 15	Powers Ferry Sta to South Loop Sta	1 way	Added	32	32	60	20.97	95.3	33	6	694.6	51.8
Local	CO 15A	South Loop Sta to Powers Ferry Sta	1 way	Added	32	32	60	20.80	94.1	33	6	689.0	51.2
Local	CO 197	E Cobb to Sandy Spgs Sta	1 way	Modified	20	30	30	14.11	77.3	46	7	649.1	58.0
Local	CO 197-	Sandy Spgs Sta to E Cobb	1 way	Modified	20	30	30	14.11	54.6	46	7	649.1	40.9
Local	CO 20 SOUT	Cumberland Sta to Windy Hill Sta	1 way	Modified	30	40	60	17.21	75.8	31	5	524.9	37.9
Local	CO 20 SOUT-	Windy Hill Sta to Cumberland Sta	1 way	Modified	30	40	60	17.21	74.7	31	5	524.9	37.3
Local	CO 202	W Cobb to N Point Sta	1 way	Modified	30	30	30	30.98	150.5	40	9	1,239.2	97.9
Local	CO 202-	N Point Sta to W Cobb	1 way	Modified	30	30	30	30.98	121.4	40	9	1,239.2	78.9
Local	CO 203	N Marietta to Powers Ferry Sta	1 way	Modified	24	24	30	10.73	53.1	48	5	509.7	41.2
Local	CO 203-	Powers Ferry Sta to N Marietta	1 way	Modified	24	24	30	10.93	48.4	48	5	519.2	37.5
Local	CO 207	W Cobb to N Point Sta	1 way	Modified	16	30	30	16.62	77.7	51	10	839.3	64.1
Local	CO 207-	N Point Sta to W Cobb	1 way	Modified	16	30	30	16.62	84.2	51	10	839.3	69.5
Local	CO 207A	Big Chicken Sta to N Point Sta	1 way	Modified	16	30	0	27.66	152.9	41	17	1,120.2	103.2
Local	CO 207A-	N Point Sta to Big Chicken Sta	1 way	Modified	16	30	0	27.66	119.1	41	17	1,120.2	80.4
Local	CO 208	County Farm to Sandy Spgs Sta	1 way	Modified	24	24	30	17.87	96.3	48	8	848.8	74.6
Local	CO 208-	Sandy Spgs Sta to County Farm	1 way	Modified	24	24	30	17.87	79.0	48	8	848.8	61.2
Local	CO 209	Cumberland Sta to Six Flags Sta	1 way	Modified	12	24	30	11.79	46.0	63	9	736.9	47.1
Local	CO 209-	Six Flags Sta to Cumberland Sta	1 way	Modified	12	24	30	11.79	56.3	63	9	736.9	57.7

Table 3.3-2 Alternative 1 – Average Weekday Bus Operating Plan (cont.)

TABLE 3.3-2 (CONTINUED)
ALTERNATIVE 1—AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Base	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Local	CO 20A HIGH	Cumberland Sta to Highlands Pkwy	1 way	Modified	30	60	0	11.49	49.9	21	4	241.3	17.5
Local	CO 20A HIGH-	Highlands Pkwy to Cumberland Sta	1 way	Modified	30	60	0	11.49	57.8	21	4	241.3	20.2
Local	CO 210	Downtown Kennesaw to Homes Sta	1 way	Modified	24	24	60	32.60	138.2	43	11	1,385.5	96.7
Local	CO 210-	Homes Sta to Downtown Kennesaw	1 way	Modified	24	24	60	32.60	119.9	43	11	1,385.5	84.0
Local	CO 211	Acworth P&R to Sandy Plains P&R	1 way	Modified	30	30	0	24.81	113.8	30	8	744.3	56.9
Local	CO 211-	Sandy Plains P&R to Acworth P&R	1 way	Modified	30	30	0	24.81	110.9	30	8	744.3	55.5
Local	CO 212	Stilesboro Rd to Holcomb Br Sta	1 way	Modified	30	30	60	27.15	149.8	35	9	950.3	86.2
Local	CO 212-	Holcomb Br Sta to Stilesboro Rd	1 way	Modified	30	30	60	27.15	108.5	35	9	950.3	62.4
Local	CO 213	Powder Spgs to Cumberland Sta	1 way	Modified	30	30	60	10.96	77.7	35	35	383.6	44.7
Local	CO 213-	Cumberland Sta to Powder Spgs	1 way	Modified	30	30	60	10.96	45.4	35	4	383.6	26.1
Local	CO 214	Powder Spgs to Sandy Plains P&R	1 way	Modified	16	24	60	29.56	159.6	50	18	1,478.0	131.7
Local	CO 214-	Sandy Plains P&R to Powder Spgs	1 way	Modified	16	24	60	29.56	129.5	50	18	1,468.0	106.8
Local	CO 215	Villa Rica Rd to E Woodstock	1 way	Modified	30	30	0	25.88	118.7	30	8	776.4	59.4
Local	CO 215-	E Woodstock to Villa Rica Rd	1 way	Modified	30	30	0	25.88	110.5	30	8	776.4	55.2
Local	CO 217	Six Flags Sta to SR 92	1 way	Modified	30	30	60	34.96	160.6	35	11	1,223.6	92.4
Local	CO 217-	SR 92 to Six Flags Sta	1 way	Modified	30	30	60	34.96	170.8	35	11	1,223.6	98.2
Local	CO 218	Big Chicken Sta to Austell	1 way	Modified	24	30	0	14.60	56.8	33	33	481.8	31.2
Local	CO 218-	Austell to Big Chicken Sta	1 way	Modified	24	30	0	14.60	75.5	33	6	481.8	41.5
Local	CO 45 BARR	South Loop Sta to Town Ctr Sta	1 way	Modified	8	16	30	12.93	62.7	89	89	1,147.5	91.8
Local	CO 45 BARR-	Town Ctr Sta to South Loop Sta	1 way	Modified	8	16	30	12.93	74.4	89	17	1,147.5	108.8
Local	CO 70	Cumberland to Holmes Sta	1 way	Modified	60	60	0	12.50	39.0	15	15	187.5	9.7
Local	CO 70A	Holmes Sta to Cumberland	1 way	Modified	60	60	0	12.49	54.8	15	2	187.4	13.7
Local	GW 10	Old Norcross Sta to Doraville Sta	1 way	Modified	16	24	30	13.02	54.1	55	55	716.1	48.7
Local	GW 10-	Doraville Sta to Old Norcross Sta	1 way	Modified	16	24	30	13.02	67.3	55	8	716.1	60.6
Local	GW 10A	Old Norcross Sta to Doraville Sta	1 way	Modified	16	24	30	13.91	71.6	55	55	765.1	64.4
Local	GW 10A-	Doraville Sta to Old Norcross Sta	1 way	Modified	16	24	30	13.91	57.5	55	8	765.1	51.8
Local	GW 15	Discover Mills Sta to I-985/SR 20 P&R	1 way	Added	24	24	60	14.81	62.9	43	43	629.4	40.2
Local	GW 15-	I-985/SR 20 P&R to Discover Mills Sta	1 way	Added	24	24	60	14.81	61.2	43	7	629.4	42.8
Local	GW 20	Gwinnett Pl to Jimmy Carter Blvd	1 way	Modified	16	24	30	21.08	101.0	55	55	1,159.4	90.9
Local	GW 20-	Jimmy Carter Blvd to Gwinnett Pl	1 way	Modified	16	24	30	21.08	90.8	55	10	1,159.4	81.7
Local	GW 25	Discover Mills Sta to Steve Reynolds Sta	1 way	Added	24	24	60	13.21	43.9	43	43	561.4	30.8
Local	GW 25-	Steve Reynolds Sta to Discover Mills Sta	1 way	Added	24	24	60	13.21	46.8	43	5	561.4	32.7
Local	GW 30	Pleasantdale Sta to Old Norcross Sta	2 way	Modified	16	24	30	19.74	100.1	95	5	1,875.3	155.1
Local	GW 40	Gwinnett Pl to Lawrenceville	1 way	Modified	24	24	60	19.36	75.3	43	43	822.8	52.7
Local	GW 40-	Lawrenceville to Gwinnett Pl	1 way	Modified	24	24	60	19.36	83.8	43	9	822.8	58.7
Local	GW 50	Old Norcross Sta to Mall of Georgia	1 way	Modified	16	24	30	23.62	82.5	55	55	1,299.1	74.2
Local	GW 50-	Mall of Georgia to Old Norcross Sta	1 way	Modified	16	24	30	23.62	89.3	55	8	1,299.1	80.4
Local	GW 60	Duluth to Centerville	1 way	Modified	30	60	60	21.63	92.4	26	26	562.4	39.3
Local	GW 60-	Centerville to Duluth	1 way	Modified	30	60	60	21.63	118.9	26	7	562.4	50.5
Local	GW 70	Park Place to Mall of Georgia	1 way	Modified	30	60	60	24.60	87.4	26	26	639.6	37.1
Local	GW 70-	Mall of Georgia to Park Place	1 way	Modified	30	60	60	24.60	83.8	26	6	639.6	35.6
Local	GW 80	Old Norcross Sta to Dacula CR Sta	1 way	Modified	30	30	0	20.44	65.7	30	30	613.2	32.8
Local	GW 80-	Dacula CR Sta to Old Norcross Sta	1 way	Modified	30	30	0	20.44	70.0	30	5	613.2	35.0
Local	GW 85	Indian Tr Sta to Lilburn CR Sta	1 way	Modified	30	30	0	11.76	61.9	30	30	352.8	31.0
Local	GW 85-	Lilburn CR Sta to Indian Trail Sta	1 way	Modified	30	30	0	11.76	49.0	30	4	352.8	24.5
Local	GW 90	Old Norcross Sta to Snellville	1 way	Modified	30	30	0	13.78	53.9	30	30	413.4	27.0
Local	GW 90-	Snellville to Old Norcross Sta	1 way	Modified	30	30	0	13.78	45.8	30	4	413.4	22.9

Table 3.3-2

**Alternative 1 – Average Weekday Bus
Operating Plan (cont.)**
**TABLE 3.3-2 (CONTINUED)
ALTERNATIVE 1–AVERAGE WEEKDAY BUS OPERATING PLAN**

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Base	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Local	150B-NRIVER	Sandy Spgs Sta to Northridge Sta	1 way	Added	24	24	30	7.40	44.8	48		351.5	34.7
Local	150B-NRIVER-	Northridge Sta to Sandy Spgs Sta	1 way	Added	24	24	30	7.40	48.6	48	4	351.5	37.6
Local	ACW-KENN	Acworth to Elizabeth Sta	1 way	Added	30	30	60	15.38	107.1	35		538.3	61.6
Local	ACW-KENN-	Elizabeth Sta to Acworth	1 way	Added	30	30	60	15.38	68.5	35	7	538.3	39.4
Local	AMWSPAL	Pleasantdale Sta to Peachtree Corners	1 way	Added	24	24	60	15.31	76.2	43		650.7	53.3
Local	AMWSPAL-	Peachtree Corners to Pleasantdale Sta	1 way	Added	24	24	60	15.31	77.7	43	7	650.7	54.4
Local	CANTON	Canton to Elizabeth Sta	1 way	Added	24	24	60	20.21	90.5	43		858.9	63.3
Local	CANTON-	Elizabeth Sta to Canton	1 way	Added	24	24	60	20.21	77.1	43	11	858.9	54.0
Local	CANTON-CIRC	Canton Circulator	1 way	Added	12	24	30	14.59	42.2	63		911.9	43.3
Local	CANTON-CIRC-	Canton Circulator	1 way	Added	12	24	30	14.59	41.1	63	5	911.9	42.1
Local	CN-TL	Canton P&R to Towne Lake P&R	1 way	Added	30	30	60	16.46	56.3	35		576.1	32.3
Local	CN-TL-	Towne Lake P&R to Canton P&R	1 way	Added	30	30	60	16.46	51.9	35	4	576.1	29.9
Local	CRB-BTH	Holcomb Br Sta to Birmingham Rd	1 way	Added	24	30	0	15.26	55.3	33		503.6	30.4
Local	CRB-BTH-	Birmingham Rd to Holcomb Br Sta	1 way	Added	24	30	0	15.26	69.5	33	8	503.6	38.2
Local	CUMMCIRC	Cumming Circulator	1 way	Added	12	24	30	8.26	26.1	63		516.3	26.7
Local	CUMMCIRC-	Cumming Circulator	1 way	Added	12	24	30	8.26	24.3	63	4	516.3	24.9
Local	CUM-WD	Cumming to Windward Sta	1 way	Added	24	30	60	16.27	58.1	38		618.3	36.3
Local	CUM-WD-	Windward Sta to Cumming	1 way	Added	24	30	60	16.27	48.8	38	5	618.3	30.5
Local	JBRDG	McFarland P&R to Holcomb Br Sta	1 way	Added	24	24	60	16.88	63.2	43		717.4	44.2
Local	JBRDG-	Holcomb Br Sta to McFarland P&R	1 way	Added	24	24	60	16.88	57.7	43	10	717.4	40.4
Local	LCGWNT	LCI Gwinnett Circulator	1 way	Added	8	16	30	14.77	61.6	89		1,310.8	90.1
Local	LCGWNT-	LCI Gwinnett Circulator	1 way	Added	8	16	30	14.77	62.8	89	16	1,310.8	91.8
Local	NPCIRC	Northpoint Circulator	1 way	Added	8	16	30	9.86	39.1	89		875.1	57.2
Local	NPCIRC-	Northpoint Circulator	1 way	Added	8	16	30	9.86	39.5	89	7	875.1	57.8
Local	OALB	McGinnis Ferry P&R to Holcomb Br Sta	1 way	Added	24	30	60	13.07	58.7	38		496.7	36.7
Local	OALB-	Holcomb Br Sta to McGinnis Ferry P&R	1 way	Added	24	30	60	13.07	56.4	38	5	496.7	35.3
Local	PIB	Doraville Sta to Pleasant Hill	1 way	Added	24	30	60	12.08	42.6	38		459.0	26.6
Local	PIB-A	Pleasant Hill to Doraville Sta	1 way	Added	24	30	60	12.36	52.1	38	4	469.7	32.5
Local	SB-PH	Old Milton Sta to Old Norcross Sta	1 way	Added	30	30	60	13.12	62.5	35		459.2	36.0
Local	SB-PH-	Old Norcross Sta to Old Milton Sta	1 way	Added	30	30	60	13.12	60.4	35	5	459.2	34.7
Local	SRI20	Old Milton Sta to Discover Mills Sta	1 way	Added	24	24	30	15.19	66.7	48		721.5	51.7
Local	SRI20-	Discover Mills Sta to Old Milton Sta	1 way	Added	24	24	30	15.19	66.5	48	5	721.5	51.6
Local	SRI40N	Hickory Flat to N Point Sta	1 way	Added	30	30	60	13.31	57.3	35		465.9	33.0
Local	SRI40N-	N Point Sta to Hickory Flat	1 way	Added	30	30	60	13.31	42.3	35	5	465.9	24.3
Local	TLC-A	Towne Lake Circulator, East	1 way	Added	16	24	30	10.26	46.8	55		564.3	42.1
Local	TLC-A-	Towne Lake Circulator, East	1 way	Added	16	24	30	10.26	43.8	55	6	564.3	39.5
Local	TLC-B	Towne Lake Circulator, West	1 way	Added	16	24	30	12.20	51.6	55		671.0	46.5
Local	TLC-B-	Towne Lake Circulator, West	1 way	Added	16	24	30	12.20	46.1	55	5	671.0	41.5
Local	WEB-KIM	N Point Sta to Alpharetta	1 way	Added	24	30	60	12.54	47.3	38		476.5	29.6
Local	WEB-KIM-	Alpharetta to N Point Sta	1 way	Added	24	30	60	12.54	47.1	38	5	476.5	29.4
Local	WIND	McFarland P&R to N Point Sta	1 way	Added	16	24	30	10.66	45.6	55		586.3	41.0
Local	WIND-	N Point Sta to McFarland P&R	1 way	Added	16	24	30	10.66	42.0	55	6	586.3	37.8
Local	WIND/MCF	Windward/McFarland Circulator	1 way	Added	16	24	30	15.54	59.8	55		854.7	53.8
Local	WIND/MCF-	Windward/McFarland Circulator	1 way	Added	16	24	30	15.54	57.2	55	8	854.7	51.5

Table 3.3-2

Alternative 1 – Average Weekday Bus Operating Plan (cont.)

TABLE 3.3-2 (CONTINUED)
ALTERNATIVE 1--AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Base	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Express	GR 400	Cumming to N Point Sta	1 way	Modified	30	60	0	17.37	31.5	21	21	364.8	11.0
Express	GR 400A	N Point Sta to Cumming	1 way	Modified	30	60	0	19.74	33.4	21	3	414.5	11.7
Express	GR 401	N Forsyth to N Point Sta	1 way	Modified	30	0	0	21.68	43.1	12	3	260.2	8.6
Express	GR 408	Peachtree Pkwy to Doraville	1 way	No Change	30	60	0	25.60	96.7	21	5	537.6	33.8
Express	GR 409	Holcomb Br Sta to Jimmy Carter Sta	1 way	Modified	30	60	0	10.77	55.2	21	21	226.2	19.3
Express	GR 409-	Jimmy Carter Sta to Holcomb Br Sta	1 way	Modified	30	60	0	10.77	49.1	21	4	226.2	17.2
Express	GR 410	Discover Mills Sta to Lindbergh Sta	1 way	Modified	30	0	0	25.23	44.9	12	3	302.8	9.0
Express	GR 428	SE DeKalb to Perimeter Ctr	1 way	No Change	30	60	0	28.28	138.4	21	9	593.9	48.4
Express	GR 428-	Perimeter Ctr to SE DeKalb	1 way	No Change	30	60	0	28.28	134.1	21	9	593.9	46.9
Express	GR 467	Douglas County to Galleria Sta	1 way	Modified	30	0	0	28.83	92.6	12	5	346.0	18.5
Express	GR 477	Dallas/Powder Sprgs to Galleria Sta	1 way	Modified	30	0	0	28.48	148.8	12	8	341.8	29.8
Express	GR 485	Cumberland Sta to Flat Shoals P&R	1 way	No Change	30	60	0	22.77	64.3	21	21	478.2	22.5
Express	GR 485A	Flat Shoals P&R to Cumberland Sta	1 way	No Change	30	60	0	22.19	76.8	21	6	466.0	26.9
Express	GW 101	I-985/SR 20 P&R to Atlanta CBD	1 way	Modified	15	60	0	40.30	74.0	33	33	1,329.9	40.7
Express	GW 101A	Atlanta CBD to Mall of Georgia	1 way	Modified	30	60	0	40.27	105.4	21	9	845.7	36.9
Express	GW 103	Discover Mills Sta to Atlanta CBD	1 way	Modified	30	0	0	30.51	74.6	12	12	366.1	14.9
Express	GW 103A	Atlanta CBD to Discover Mills Sta	1 way	Modified	30	0	0	38.87	127.4	12	7	466.4	25.5
Express	GR 490	Canon P&R to Town Center Sta	1 way	Modified	30	0	0	18.21	30.0	12	2	218.5	6.0
Express	GR 493	Towne Lake P&R to N Point Sta	1 way	Modified	30	60	0	16.89	67.1	21	21	354.7	23.5
Express	GR 493-	N Point Sta to Towne Lake P&R	1 way	Modified	30	60	0	16.89	59.0	21	5	354.7	20.6
Express	GR 497	Towne Lake P&R to Town Center Sta	1 way	Modified	30	60	0	7.27	18.1	21	1	152.7	6.3
Express	CDRS/DM	Cedars Rd CR Sta to Discover Mills Sta	1 way	Added	30	0	0	9.38	26.2	12	2	112.6	5.2
Express	CH/OMP	Collins Hill P&R to Old Milton Sta	1 way	Added	30	0	0	22.25	87.0	12	12	267.0	17.4
Express	CH/OMP-	Old Milton Sta to Collins Hill P&R	1 way	Added	30	0	0	22.25	87.7	12	6	267.0	17.5
Express	HM/DM	Hamilton Mill P&R to Discover Mills Sta	1 way	Added	30	0	0	14.72	24.8	12	2	176.6	5.0
Express	TC/OMP	Town Center Sta to Old Milton Sta	1 way	Added	30	0	0	23.74	81.9	12	12	284.9	16.4
Express	TC/OMP A	Old Milton Sta to Town Center Sta	1 way	Added	30	0	0	23.97	74.7	12	6	287.6	14.9
Express	TL/OMP	Towne Lake P&R to Old Milton Sta	1 way	Added	30	0	0	17.94	70.3	12	4	215.3	14.1
TOTALS										7,047	587	106,936	7,620

4.0 ALTERNATIVE 2

Alternative 2 is the “Policy Based” alternative. The objective of Alternative 2 is to direct land use and mobility enhancements to accomplish the proposed 2030 Regional Development Plan policies (proposed August 2002). The household and employment forecast control totals established for the 2025 RTP Limited Update are held constant in this alternative. However, the distribution of households and employment are modified to enhance the proposed policies. For example, the distribution is modified to focus development in existing centers and corridors, provide higher density transit-supportive development around transit stations, and provide growth management/ buffers in environmentally sensitive areas. As a policy, Alternative 2 calls for earlier implementation of transit projects to support the resulting more focused land development.

To evaluate the effects of this policy-based land use distribution on the transportation system, **the fixed guideway operations and bus operations are the same as defined for Alternative 1, as described in the previous section.** With the same transit network and a transit supportive distribution of land use, the transit performance is markedly improved in Alternative 2. About 62 percent of Northern Sub-Area households are within 0.4 mile of a transit station or stop (as compared to 54 percent of households in Alternative 1). The percent of commute trips that could use transit increases to 58 percent (as compared to 49 percent in Alternative 1). However, there is no significant change in jobs within walking distance of transit in Alternative 2 compared to Alternative 1.

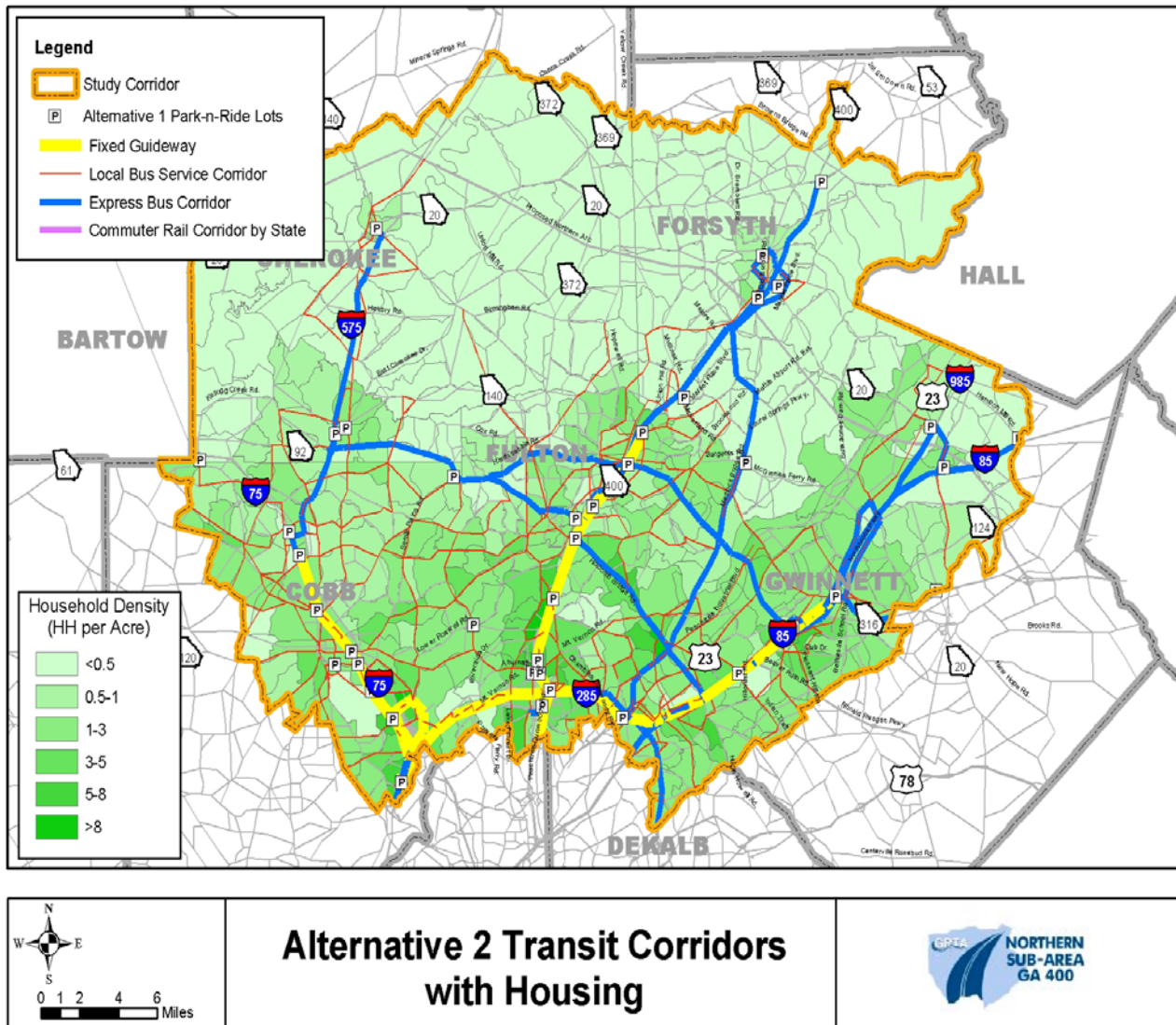
Two figures follow that illustrate the fixed guideway, express bus, and local bus corridors defined for Alternative 1 mapped on the 2025 household and employment densities that could result from implementing the policies from the proposed 2030 Regional Development Plan (proposed August 2002).

4.1 Operating Plan Results

Based on the model run, Alternative 2 results in about 281,150 daily transit trips being made within, into, or from the Northern Sub-Area. With Transportation Demand Management (TDM) Level 2 measures included in the model run, there are about 304,350 daily transit trips. Both results represent substantial growth over the 251,850 daily transit trips without TDM measures and 247,600 daily transit trips with TDM measures in Alternative 1. Focusing on commute trips, the transit share of work trip productions is 13.5 percent without TDM measures and 15.6 percent with TDM measures, increases over Alternative 1 of approximately 20 percent and 38 percent, respectively. And there is about a 3.8 percent reduction in average transit travel time per commute trip in Alternative 2 compared to Alternative 1.

Since the fixed guideways operate as a regional system, the fixed guideway operating plans for each alternative include the operating statistics for the entire region. However, Table 2.3-1 is provided as a “pivot point” operating plan for

all alternatives so that the incremental operating statistics attributable to each alternative's Northern Sub-Area fixed guideways can be easily calculated, if desired. Table 2.3-1 presents 2025 fixed guideway operating statistics for the RTP Limited Update fixed guideways, **excluding the Northwest LRT Line, the North Line extension to Windward Parkway, and the Cumberland People Mover**. In Section 6, this "pivot point" approach is also used in estimating the operating and maintenance (O&M) cost results for fixed guideways attributable only to the Northern Sub-Area. Note that by excluding the entire Northwest LRT line in the "pivot point" table, the Arts Center station to Cumberland station segment is also attributed to the Northern Sub-Area. This is done as there is no effective way to break out the operating statistics of a line segment. Since the Northwest LRT line is assumed in all alternatives, it does not affect the operating characteristics and O&M costs comparisons across the alternatives.



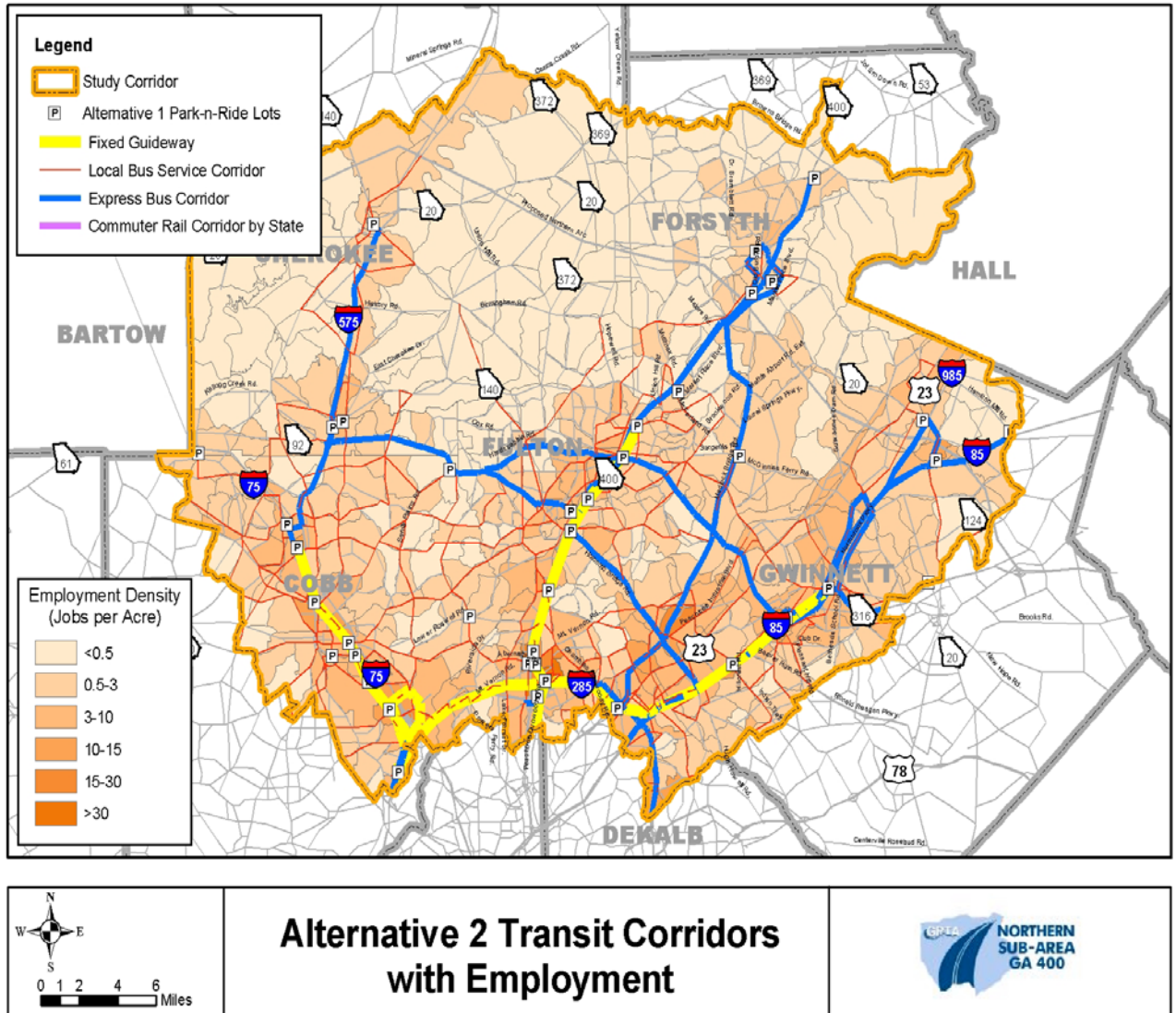


Table 4.1-1 presents the 2025 fixed guideway operating statistics for the RTP fixed guideway system and the increments attributed to Alternative 2. The operating requirements attributed to Alternative 2 for HRT are 29 cars, 7.12 million annual revenue car-miles, and 24,300 annual train-hours; for LRT, 60 cars, 7.08 million annual revenue car-miles, and 59,500 annual train-hours; for BRT, 126 buses, 13.02 million annual bus-miles, and 424,000 annual bus-hours; and for Circulators, 12 cars, 720,000 annual revenue car-miles, and 43,200 annual car-hours.

Table 4.1-2 presents the 2025 weekday bus operations plan for Alternative 2. This table lists the peak, base, and late evening service levels assumed in Alternative 2. The bus operations plan requires 581 peak buses and provides 107,232 daily bus-miles and 7,590 daily bus-hours of service.

Table 4.1-1 | **Alternative 2 – Fixed Guideway
Operating Plan**

2025 HRT Operating Plan

From	To	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
				Peak	base	Sat/eve	late/Sun	Peak	base	Sat/eve	late/Sun	Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)
North-South Line															
Doraville	Airport	40.0	22.2	8	8	10	15	8	8	6	4	96	116	13.63	72.0
Windward Parkway	Airport	57.0	35.7	8	8	10	15	8	8	6	4	128	154	20.41	97.7
Windward Parkway	Lindbergh	31.0	21.6				15				4			0.91	11.0
Trunk Average/Total:				4	4	5	8					224	270	34.95	180.7
East-West Line															
Hightower	Indian Creek	29.0	14.9	8	8	10	15	6	6	5	4	54	65	7.27	54.3
Bankhead	King Mem	10.0	4.1	8	8	10	15	2	2	2	2	8	10	0.74	23.5
Trunk Average/Total:				4	4	5	8					62	75	8.01	77.8
TOTALS												286	345	42.95	258.5
HRT Attributed to Alternative 2												24	29	7.12	24.3

2025 LRT Operating Plan

From DeKalb LRT Lindbergh Northwest LRT Arts Center		To South DeKalb Town Center		Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
						Peak	Base	Sat/eve	late/Sun	Peak	Base	Sat/eve	late/Sun	Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)
				28.0	12.4	8	8	10	15	3	2	2	2	27	33	2.57	54.3
				31.3	21.8	8	8	10	15	5	3	3	3	50	60	7.08	59.5
TOTALS													77	93	9.65	113.8	
LRT Attributed to Alternative 2														50	60	7.08	59.5

2025 BRT Operating Plan

2025 BRT Operating Plan															
From	To	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
				Peak	Base	Sat/eve	late/Sun	Peak	Base	Sat/eve	late/Sun	Peak	Total	Bus-Mi. (million)	Bus-Hrs. (thous.)
I-285 BRT															
Big Chicken	Discover Mills	52.0	30.7	8	8	10	15	7	4	4	3	105	126	13.02	424.0
TOTALS												105	126	13.02	424.0
BRT Attributed to Alternative 2												105	126	13.02	424.0

2025 Fixed Route Circulator Operating Plan

	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
			Peak	Base	Sat/eve	late/Sun	Peak	Base	Sat/eve	late/Sun	Peak	Total	Car-Mi. (million)	Car-Hrs. (thous.)
Cumberland Circulator	16.5	6.8	5	8	10	15	1	1	1	1	10	12	0.72	43.2
TOTALS											10	12	0.72	43.2
Circulator Attributed to Alternative 2											10	12	0.72	43.2

Note 1: Ten-minute peak frequencies were modeled for the heavy rail lines, per the current RTP. However, to accommodate load projections on the North and Northeast lines with 8-car trains, 8-minute peak frequencies on all heavy rail lines were assumed for the operating plans.

Note 2: Ten-minute peak frequencies were modeled for the Lindbergh-South DeKalb light rail line, per the current RTP. However, for consistency with the heavy and light rail line frequencies, 8-minute peak frequencies were assumed for the operating plans.

Note 3: For costing purposes, 5-car trains in the peak on the Northwest Line were assumed in order to meet line load projections. An alternative assumption would be 4-car trains with improved frequencies.

Table 4.1-2

Alternative 2 – Average Weekday Bus Operating Plan

TABLE 4.1-2
ALTERNATIVE 2--AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway		Distance & Run Times		Daily Operating Statistics		
					Peak	Base	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles
Local	12 HOWEL	Midtown Sta to Cumberland Sta	1 way	Modified	16	24	10.70	59.1	55	8	588.5
Local	12 HOWEL-	Cumberland Sta to Midtown Sta	1 way	Modified	16	24	10.70	63.8	55	8	588.5
Local	124 CHAMB	Chamblee Sta to Tucker	1 way	Modified	16	24	10.08	54.0	55	7	554.4
Local	124 CHAMB-	Tucker to Chamblee Sta	1 way	Modified	16	24	10.08	45.4	55	7	554.4
Local	129 CHAMBL	Chamblee Sta to N Spgs Sta	1 way	Modified	24	24	10.02	59.1	48	5	476.0
Local	129 CHAMBL-	N Spgs Sta to Chamblee Sta	1 way	Modified	24	24	10.02	59.1	48	5	476.0
Local	132 TILL	Chamblee Sta to Tilly Mill	1 way	Modified	24	24	7.47	36.9	48	4	354.8
Local	132 TILL-	Tilly Mill to Chamblee Sta	1 way	Modified	24	24	7.47	44.3	48	4	354.8
Local	135 NIS-RKR	Chamblee Sta to N Point Sta	1 way	Modified	24	24	27.33	118.2	48	11	1,298.2
Local	135 NIS-RKR-	N Point Sta to Chamblee Sta	1 way	Modified	24	24	27.15	127.0	48	11	1,289.6
Local	148 POWER	Sandy Spgs Sta to Powers Ferry Sta	1 way	Modified	24	24	7.49	42.3	48	4	355.8
Local	148 POWER-	Powers Ferry Sta to Sandy Spgs Sta	1 way	Modified	24	24	7.49	43.8	48	4	355.8
Local	150 PERI	Dunwoody Sta to Northridge Sta	1 way	Modified	24	24	8.18	47.6	48	4	388.6
Local	150 PERI-	Northridge Sta to Dunwoody Sta	1 way	Modified	24	24	8.18	52.1	48	5	388.6
Local	41 WINDSOR	Brookhaven Sta to Sandy Spgs Sta	1 way	Modified	24	24	7.57	49.6	48	4	359.6
Local	41 WINDSOR-	Sandy Spgs Sta to Brookhaven Sta	1 way	Modified	24	24	7.57	44.4	48	4	359.6
Local	55 SANDSP	Lindbergh Sta to Roswell Rd Sta	1 way	Modified	8	16	7.72	51.2	89	12	685.2
Local	55 SANDSP-	Roswell Rd Sta to Lindbergh Sta	1 way	Modified	8	16	7.72	44.7	89	12	685.2
Local	85 HOLCOMB	Northridge Sta to N Point Sta	1 way	Modified	24	24	13.39	62.0	48	6	636.0
Local	85 HOLCOMB-	N Point Sta to Northridge Sta	1 way	Modified	24	24	13.39	66.1	48	6	636.0
Local	87C ROSW	Holcomb Br Sta to Dunwoody Sta	1 way	Modified	16	24	14.38	68.5	55	9	790.9
Local	87C ROSW-	Dunwoody Sta to Holcomb Br Sta	1 way	Modified	16	24	14.38	74.0	55	9	790.9
Local	91 HENDERS	Brookhaven Sta to Doraville Sta	1 way	Modified	24	24	12.84	59.8	48	6	609.9
Local	91 HENDERS-	Doraville Sta to Brookhaven Sta	1 way	Modified	24	24	12.84	65.3	48	6	609.9
Local	PC1	Perim Ctr Circ 1, Perimeter Center	1 way	Added	8	16	4.17	25.4	89	7	370.1
Local	PC1-	Perim Ctr Circ 1, Perimeter Center	1 way	Added	8	16	4.17	24.6	89	7	370.1
Local	PC2	Perim Ctr Circ 2, Medical Center	1 way	Added	8	16	4.22	26.4	89	7	374.5
Local	PC2-	Perim Ctr Circ 2, Medical Center	1 way	Added	8	16	4.22	26.9	89	7	374.5
Local	CO 10 AR/	Big Chicken Sta to Cumberland Sta	1 way	Modified	16	24	6.97	30.5	55	4	383.4
Local	CO 10 AR-	Cumberland Sta to Big Chicken Sta	1 way	Modified	16	24	6.97	32.6	55	4	382.8
Local	CO 15	Powers Ferry Sta to South Loop Sta	1 way	Added	32	32	20.97	93.8	33	6	694.6
Local	CO 15A	South Loop Sta to Powers Ferry Sta	1 way	Added	32	32	20.80	92.4	33	6	689.0
Local	CO 197	E Cobb to Sandy Spgs Sta	1 way	Modified	20	30	14.11	69.2	46	7	649.1
Local	CO 197-	Sandy Spgs Sta to E Cobb	1 way	Modified	20	30	14.11	55.3	46	7	649.1
Local	CO 20 SOUT	Cumberland Sta to Windy Hill Sta	1 way	Modified	30	40	17.21	76.5	31	5	524.9
Local	CO 20 SOUT-	Windy Hill Sta to Cumberland Sta	1 way	Modified	30	40	17.21	72.3	31	5	524.9
Local	CO 202	W Cobb to N Point Sta	1 way	Modified	30	30	30.98	151.0	40	9	1,239.2
Local	CO 202-	N Point Sta to W Cobb	1 way	Modified	30	30	30.98	113.2	40	9	1,239.2
Local	CO 203	N Marietta to Powers Ferry Sta	1 way	Modified	24	24	10.73	55.5	48	5	509.7
Local	CO 203-	Powers Ferry Sta to N Marietta	1 way	Modified	24	24	10.93	50.1	48	5	519.2
Local	CO 207	W Cobb to N Point Sta	1 way	Modified	16	30	16.62	75.1	51	10	839.3
Local	CO 207-	N Point Sta to W Cobb	1 way	Modified	16	30	16.62	79.8	51	10	839.3
Local	CO 207A	Big Chicken Sta to N Point Sta	1 way	Modified	16	30	27.66	150.1	41	17	1,120.2
Local	CO 207A-	N Point Sta to Big Chicken Sta	1 way	Modified	16	30	27.66	113.5	41	17	1,120.2
Local	CO 208	County Farm to Sandy Spgs Sta	1 way	Modified	24	24	17.87	101.4	48	8	848.8
Local	CO 208-	Sandy Spgs Sta to County Farm	1 way	Modified	24	24	17.87	81.4	48	8	848.8
Local	CO 209	Cumberland Sta to Six Flags Sta	1 way	Modified	12	24	11.79	51.9	63	10	736.9
Local	CO 209-	Six Flags Sta to Cumberland Sta	1 way	Modified	12	24	11.79	59.5	63	10	736.9

Table 4.1-2

Alternative 2 – Average Weekday Bus Operating Plan (cont.)

TABLE 4.1-2 (CONTINUED)
ALTERNATIVE 2--AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Base	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Local	CO 20A HIGH	Cumberland Sta to Highlands Pkwy	1 way	Modified	30	60	0	11.49	47.4	21	4	241.3	16.6
Local	CO 20A HIGH	Highlands Pkwy to Cumberland Sta	1 way	Modified	30	60	0	11.49	54.7	21	4	241.3	19.1
Local	CO 210	Downtown Kennesaw to Homes Sta	1 way	Modified	24	24	60	32.60	130.8	43	11	1,385.5	91.6
Local	CO 210	Holmes Sta to Downtown Kennesaw	1 way	Modified	24	24	60	32.60	116.9	43	11	1,385.5	81.9
Local	CO 211	Acworth P&R to Sandy Plains P&R	1 way	Modified	30	30	0	24.81	99.1	30	7	744.3	49.6
Local	CO 211	Sandy Plains P&R to Acworth P&R	1 way	Modified	30	30	0	24.81	96.7	30	7	744.3	48.3
Local	CO 212	Stilesboro Rd to Holcomb Br Sta	1 way	Modified	30	30	60	27.15	130.0	35	8	950.3	74.7
Local	CO 212	Holcomb Br Sta to Stilesboro Rd	1 way	Modified	30	30	60	27.15	96.9	35	8	950.3	55.7
Local	CO 213	Powder Spgs to Cumberland Sta	1 way	Modified	30	30	60	10.96	76.9	35	4	383.6	44.2
Local	CO 213	Cumberland Sta to Powder Spgs	1 way	Modified	30	30	60	10.96	42.9	35	4	383.6	24.7
Local	CO 214	Powder Spgs to Sandy Plains P&R	1 way	Modified	16	24	60	29.36	147.4	50	17	1,478.0	121.6
Local	CO 214	Sandy Plains P&R to Powder Spgs	1 way	Modified	16	24	60	29.36	115.7	50	17	1,478.0	95.5
Local	CO 215	Villa Rica Rd to E Woodstock	1 way	Modified	30	30	0	25.88	116.6	30	7	776.4	58.3
Local	CO 215	E Woodstock to Villa Rica Rd	1 way	Modified	30	30	0	25.88	88.9	30	7	776.4	44.4
Local	CO 217	Six Flags Sta to SR 92	1 way	Modified	30	30	60	34.96	143.9	35	10	1,223.6	82.8
Local	CO 217	SR 92 to Six Flags Sta	1 way	Modified	30	30	60	34.96	153.9	35	10	1,223.6	88.5
Local	CO 218	Big Chicken Sta to Austell	1 way	Modified	24	30	0	14.60	57.1	33	6	481.8	31.4
Local	CO 218	Austell to Big Chicken Sta	1 way	Modified	24	30	0	14.60	72.7	33	6	481.8	40.0
Local	CO 45 BARR	South Loop Sta to Town Ctr Sta	1 way	Modified	8	16	30	12.93	58.2	89	16	1,147.5	85.1
Local	CO 45 BARR	Town Ctr Sta to South Loop Sta	1 way	Modified	8	16	30	12.93	69.7	89	16	1,147.5	101.9
Local	CO 70	Cumberland to Holmes Sta	1 way	Modified	60	60	0	12.50	37.4	15	2	187.5	9.3
Local	CO 70A	Holmes Sta to Cumberland	1 way	Modified	60	60	0	12.49	52.6	15	2	187.4	13.1
Local	GW 10	Old Norcross Sta to Doraville Sta	1 way	Modified	16	24	30	13.02	61.7	55	8	716.1	55.5
Local	GW 10	Doraville Sta to Old Norcross Sta	1 way	Modified	16	24	30	13.02	66.8	55	8	716.1	60.1
Local	GW 10A	Old Norcross Sta to Doraville Sta	1 way	Modified	16	24	30	13.91	70.9	55	9	765.1	63.8
Local	GW 10A	Doraville Sta to Old Norcross Sta	1 way	Modified	16	24	30	13.91	68.8	55	9	765.1	61.9
Local	GW 15	Discover Mills Sta to I-985/SR 20 P&R	1 way	Added	24	24	60	14.81	68.2	43	7	629.4	47.8
Local	GW 15	I-985/SR 20 P&R to Discover Mills Sta	1 way	Added	24	24	60	14.81	67.1	43	7	629.4	47.0
Local	GW 20	Gwinnett Pl to Jimmy Carter Blvd	1 way	Modified	16	24	30	21.08	102.9	55	11	1,159.4	92.6
Local	GW 20	Jimmy Carter Blvd to Gwinnett Pl	1 way	Modified	16	24	30	21.08	97.1	55	11	1,159.4	87.4
Local	GW 25	Discover Mills Sta to Steve Reynolds Sta	1 way	Added	24	24	60	13.21	47.7	43	5	561.4	33.4
Local	GW 25	Steve Reynolds Sta to Discover Mills Sta	1 way	Added	24	24	60	13.21	49.5	43	5	561.4	34.7
Local	GW 30	Pleasantdale Sta to Old Norcross Sta	2 way	Modified	16	24	30	19.74	105.1	110	5	2,171.4	189.1
Local	GW 40	Gwinnett Pl to Lawrenceville	1 way	Modified	24	24	60	19.36	73.6	43	9	822.8	51.5
Local	GW 40	Lawrenceville to Gwinnett Pl	1 way	Modified	24	24	60	19.36	86.7	43	9	822.8	60.7
Local	GW 50	Old Norcross Sta to Mall of Georgia	1 way	Modified	16	24	30	23.62	100.5	55	10	1,299.1	90.4
Local	GW 50	Mall of Georgia to Old Norcross Sta	1 way	Modified	16	24	30	23.62	100.4	55	10	1,299.1	90.4
Local	GW 60	Duluth to Centerville	1 way	Modified	30	60	60	21.63	94.2	26	8	562.4	40.0
Local	GW 60	Centerville to Duluth	1 way	Modified	30	60	60	21.63	120.7	26	8	562.4	51.3
Local	GW 70	Park Place to Mall of Georgia	1 way	Modified	30	60	60	24.60	93.7	26	6	639.6	39.8
Local	GW 70	Mall of Georgia to Park Place	1 way	Modified	30	60	60	24.60	79.9	26	6	639.6	33.9
Local	GW 80	Old Norcross Sta to Dacula CR Sta	1 way	Modified	30	30	0	20.44	64.9	30	5	613.2	32.5
Local	GW 80	Dacula CR Sta to Old Norcross Sta	1 way	Modified	30	30	0	20.44	66.4	30	5	613.2	33.2
Local	GW 85	Indian Tr Sta to Lilburn CR Sta	1 way	Modified	30	30	0	11.76	67.9	30	4	352.8	25.6
Local	GW 85	Lilburn CR Sta to Indian Tr Sta	1 way	Modified	30	30	0	11.76	51.2	30	4	352.8	27.3
Local	GW 90	Old Norcross Sta to Snellville	1 way	Modified	30	30	0	13.78	54.7	30	4	413.4	22.5
Local	GW 90	Snellville to Old Norcross Sta	1 way	Modified	30	30	0	13.78	45.0	30	4	413.4	22.5

Table 4.1-2

Alternative 2 – Average Weekday Bus Operating Plan (cont.)

TABLE 4.1-2 (CONTINUED)
ALTERNATIVE 2--AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway		Distance & Run Times		Daily Operating Statistics		
					Peak	Base	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles
Local	150B NRIVER	Sandy Spgs Sta to Northridge Sta	1 way	Added	24	24	7.40	54.3	48	5	351.5
Local	150B NRIVER-	Northridge Sta to Sandy Spgs Sta	1 way	Added	24	24	7.40	63.5	48	5	351.5
Local	ACW-KENN	Acworth to Elizabeth Sta	1 way	Added	30	30	15.38	98.0	35	5	538.3
Local	ACW-KENN-	Elizabeth Sta to Acworth	1 way	Added	30	30	15.38	67.5	35	6	538.3
Local	AMWSPAL	Pleasantdale Sta to Peachtree Corners	1 way	Added	24	24	15.31	85.8	43	8	650.7
Local	AMWSPAL-	Peachtree Corners to Pleasantdale Sta	1 way	Added	24	24	15.31	89.4	43	8	650.7
Local	CANTON	Elizabet Sta to Canton	1 way	Added	24	24	20.21	70.4	43	9	858.9
Local	CANTON-	Canton Circulator	1 way	Added	12	24	14.59	38.6	63	5	911.9
Local	CANTON CIRC	Canton Circulator	1 way	Added	12	24	14.59	41.0	63	5	911.9
Local	CANTON CIRC-	Canton P&R to Towne Lake P&R	1 way	Added	30	30	16.46	49.2	35	4	576.1
Local	CN-TL	Towne Lake P&R to Canton P&R	1 way	Added	30	30	16.46	49.1	35	4	576.1
Local	CRB-BTH	Holcomb Br Sta to Birmingham Rd	1 way	Added	24	30	15.26	48.5	33	7	503.6
Local	CRB-BTH-	Birmingham Rd to Holcomb Br Sta	1 way	Added	24	30	15.26	53.4	33	7	503.6
Local	CUMMCIRC	Cumming Circulator	1 way	Added	12	24	8.26	29.1	63	4	516.3
Local	CUMMCIRC-	Cumming Circulator	1 way	Added	12	24	8.26	29.0	63	4	516.3
Local	CUM-WD	Cumming to Windward Sta	1 way	Added	24	30	16.27	52.3	38	5	618.3
Local	CUM-WD-	Windward Sta to Cumming	1 way	Added	24	30	16.27	47.8	38	5	618.3
Local	JBIRDG	McFarland P&R to Holcomb Br Sta	1 way	Added	24	24	16.88	57.1	43	10	717.4
Local	JBIRDG-	Holcomb Br Sta to McFarland P&R	1 way	Added	24	24	16.88	56.6	43	10	717.4
Local	LCIGWNT	LCI Gwinnett Circulator	1 way	Added	8	16	14.77	63.7	89	16	1,310.8
Local	LCIGWNT-	LCI Gwinnett Circulator	1 way	Added	8	16	14.77	64.4	89	16	1,310.8
Local	NPCIRC	Northpoint Circulator	1 way	Added	8	16	9.86	41.1	89	7	875.1
Local	NPCIRC-	Northpoint Circulator	1 way	Added	8	16	9.86	41.5	89	7	875.1
Local	OALB	McGinnis Ferry P&R to Holcomb Br Sta	1 way	Added	24	30	13.07	54.0	38	5	496.7
Local	OALB-	Holcomb Br Sta to McGinnis Ferry P&R	1 way	Added	24	30	13.07	56.9	38	5	496.7
Local	PIB	Doraville Sta to Pleasant Hill	1 way	Added	24	30	12.08	50.0	38	4	459.0
Local	PIB-A	Pleasant Hill to Doraville Sta	1 way	Added	24	30	12.36	52.5	38	4	469.7
Local	SB-PH	Old Milton Sta to Old Norcross Sta	1 way	Added	30	30	13.12	59.9	35	5	459.2
Local	SB-PH-	Old Norcross Sta to Old Milton Sta	1 way	Added	30	30	13.12	57.0	35	5	459.2
Local	SR120	Old Milton Sta to Discover Mills Sta	1 way	Added	24	24	15.19	66.7	48	5	721.5
Local	SR120-	Discover Mills Sta to Old Milton Sta	1 way	Added	24	24	15.19	66.4	48	5	721.5
Local	SR140N	Hickory Flat to N Point Sta	1 way	Added	30	30	13.31	43.7	35	4	465.9
Local	SR140N-	N Point Sta to Hickory Flat	1 way	Added	30	30	13.31	40.9	35	4	465.9
Local	TLC-A	Towne Lake Circulator, East	1 way	Added	16	24	10.26	37.4	55	5	564.3
Local	TLC-A-	Towne Lake Circulator, East	1 way	Added	16	24	10.26	36.4	55	5	564.3
Local	TLC-B	Towne Lake Circulator, West	1 way	Added	16	24	12.20	36.5	55	4	671.0
Local	TLC-B-	Towne Lake Circulator, West	1 way	Added	16	24	12.20	35.4	55	4	671.0
Local	WEB-KIM	N Point Sta to Alpharetta	1 way	Added	24	30	12.54	49.2	38	6	476.5
Local	WEB-KIM-	Alpharetta to N Point Sta	1 way	Added	24	30	12.54	49.8	38	6	476.5
Local	WIND	McFarland P&R to N Point Sta	1 way	Added	16	24	10.66	42.3	55	6	586.3
Local	WIND-	N Point Sta to McFarland P&R	1 way	Added	16	24	10.66	41.2	55	6	586.3
Local	WIND/MCF	Windward/McFarland Circulator	1 way	Added	16	24	15.54	54.6	55	7	854.7
Local	WIND/MCF-	Windward/McFarland Circulator	1 way	Added	16	24	15.54	52.9	55	7	854.7

Table 4.1-2

Alternative 2 – Average Weekday Bus Operating Plan (cont.)

TABLE 4.1-2 (CONTINUED)
ALTERNATIVE 2--AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Base	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Express	GR 400	Cumming to N Point Sta	1 way	Modified	30	60	0	17.37	32.2	21		364.8	11.3
Express	GR 400A	N Point Sta to Cumming	1 way	Modified	30	60	0	19.74	36.3	21	3	414.5	12.7
Express	GR 401	N Forsyth to N Point Sta	1 way	Modified	30	0	0	21.68	41.3	12	2	260.2	8.3
Express	GR 408	Peachtree Pkwy to Doraville	1 way	No Change	30	60	0	25.60	95.5	21	5	537.6	33.4
Express	GR 409	Holcomb Br Sta to Jimmy Carter Sta	1 way	Modified	30	60	0	10.77	57.6	21		226.2	20.2
Express	GR 409-	Jimmy Carter Sta to Holcomb Br Sta	1 way	Modified	30	60	0	10.77	53.3	21	4	226.2	18.7
Express	GR 410	Discover Mills Sta to Lindbergh Sta	1 way	Modified	30	0	0	25.23	45.0	12	3	302.8	9.0
Express	GR 428	SE DeKalb to Perimeter Ctr	1 way	No Change	30	60	0	28.28	136.9	21		593.9	47.9
Express	GR 428-	Perimeter Ctr to SE DeKalb	1 way	No Change	30	60	0	28.28	133.8	21	9	593.9	46.8
Express	GR 467	Douglas County to Galleria Sta	1 way	Modified	30	0	0	28.83	88.7	12	5	346.0	17.7
Express	GR 477	Dallas/Powder Sprgs to Galleria Sta	1 way	Modified	30	0	0	28.48	150.2	12	8	341.8	30.0
Express	GR 485	Cumberland Sta to Flat Shoals P&R	1 way	No Change	30	60	0	22.77	57.8	21		478.2	20.2
Express	GR 485A	Flat Shoals P&R to Cumberland Sta	1 way	No Change	30	60	0	22.19	76.7	21	5	466.0	26.9
Express	GW 101	I-985/SR 20 P&R to Atlanta CBD	1 way	Modified	15	60	0	40.30	72.9	33		1,329.9	40.1
Express	GW 101A	Atlanta CBD to Mall of Georgia	1 way	Modified	30	60	0	40.27	109.1	21	9	845.7	38.2
Express	GW 103	Discover Mills Sta to Atlanta CBD	1 way	Modified	30	0	0	30.51	73.1	12		366.1	14.6
Express	GW 103A	Atlanta CBD to Discover Mills Sta	1 way	Modified	30	0	0	38.87	128.0	12	7	466.4	25.6
Express	GR 490	Canton P&R to Town Center Sta	1 way	Modified	30	0	0	18.21	29.2	12	2	218.5	5.8
Express	GR 493	Towne Lake P&R to N Point Sta	1 way	Modified	30	60	0	16.89	57.9	21		354.7	20.3
Express	GR 493-	N Point Sta to Towne Lake P&R	1 way	Modified	30	60	0	16.89	54.9	21	4	354.7	19.2
Express	GR 497	Towne Lake P&R to Town Center Sta	1 way	Modified	30	60	0	7.27	17.7	21	1	152.7	6.2
Express	CDR5/DM	Cedars Rd CR Sta to Discover Mills Sta	1 way	Added	30	0	0	9.38	24.9	12	2	112.6	5.0
Express	CH/OMP	Collins Hill P&R to Old Milton Sta	1 way	Added	30	0	0	22.25	83.9	12		267.0	16.8
Express	CH/OMP-	Old Milton Sta to Collins Hill P&R	1 way	Added	30	0	0	22.25	85.4	12	6	267.0	17.1
Express	HM/DM	Hamilton Mill P&R to Discover Mills Sta	1 way	Added	30	0	0	14.72	24.0	12	2	176.6	4.8
Express	TC/OMP	Town Center Sta to Old Milton Sta	1 way	Added	30	0	0	23.74	69.3	12		284.9	13.9
Express	TC/OMP A	Old Milton Sta to Town Center Sta	1 way	Added	30	0	0	23.97	66.7	12	5	287.6	13.3
Express	TL/OMP	Towne Lake P&R to Old Milton Sta	1 way	Added	30	0	0	17.94	57.9	12	3	215.3	11.6
TOTALS										7,062	581	107,232	7,590

5.0 ALTERNATIVE 3

Alternative 3 is the “Local Plans Based” alternative. The objective of Alternative 3 is to use local and county land use and transportation plans as the basis for an alternative mobility investment strategy. Thus, for the transit network, no changes are made to transit services included in local transit plans. The local distribution of households and employment are used, but the local household and employment forecasts are scaled-back to control totals consistent with the forecasts established for the 2025 RTP Limited Update.

5.1 Fixed Guideway Operations

Alternative 3 includes five fixed guideway projects. In addition to the three projects already included in the RTP, Alternative 3 adds the I-285 Fixed Guideway and the Perimeter-Sandy Springs People Mover from local plans. As proposed in the *ARC I-285 Corridor Transit Feasibility Study, January 2002*, the I-285 Fixed Guideway is assumed to be a 12.7-mile, ten station project along the I-285 Corridor from the Cumberland station on the Northwest Fixed Guideway to the MARTA Doraville station. The I-285 Fixed Guideway would also provide across-platform transfers at the MARTA Dunwoody station on the North HRT Line. The Perimeter-Sandy Springs People Mover is assumed to be a 7.5-mile, 16-station loop circulator linking the Perimeter Center area and Roswell Road in Sandy Springs via Hammond Drive, Mt. Vernon Hwy and other local streets. Table 5.1-1 summarizes the Alternative 3 fixed guideway investments in the Northern Sub-Area.

Table 5.1-1 | Alternative 3 – Fixed Guideway Investments

Project Description	Source	ARC Number
Northwest Fixed Guideway, MARTA Arts Center Station to Town Center	2025 RTP Limited Update project	AR 251A, AR 251B, AR 251C
GA 400/North Line Extension, MARTA North Springs Station to Windward Station	2025 RTP Limited Update project	M-AR 234A, M-AR 234B, M-AR 234C
Cumberland People Mover	2025 RTP Limited Update project	AR 259A, AR 259B, AR 259C
I-285 Fixed Guideway, Cumberland Area to MARTA Doraville Station	RTP Illustrative project	AR 250
Perimeter-Sandy Springs People Mover	Fulton County and DeKalb County Plans	

5.1.1 Fixed Guideway Service Frequencies

The Alternative 3 transit operations plan assumes the following fixed guideway service frequencies (Table 5.1-2) in the Northern Sub-Area Study. This operating plan would have a combined service frequency of four minutes during the peak and base periods and eight minutes during the evening period on the Northwest Fixed Guideway between the Cumberland station and the Big Chicken station.

Table 5.1-2 | Alternative 3 – Fixed Guideway Service Frequencies

Fixed Guideway	Start/End Stations	Peak Headway	Base Headway	Evening Headway
Northwest	Town Center Station to MARTA Arts Center Station	8	8	10
GA 400/North Line Extension	MARTA North Springs Station to Windward Station	8	8	10
I-285	Cumberland Station to MARTA Doraville Station	8	8	10
Cumberland People Mover	Loop with 13 stops including Cumberland and Galleria stations	5	8	10
Perimeter-Sandy Springs People Mover	Loop with 16 stops including Dunwoody, Roswell Road, Sandy Springs and Perimeter East stations	8	8	10

5.1.2 Stations

Station assumptions by guideway are summarized in Table 5.1-3. Stations in bold (for example, **Cumberland**) are stations that have service from more than one guideway. The fixed guideway operations plan assumes that the two existing park-ride lots at I-75/Town Center and GA 400/Windward Parkway are converted to fixed guideway stations.

Table 5.1-3 | Alternative 3 – Station Locations

Northwest	400/North	I-285
Town Center	GA 400/Holcomb Bridge	Big Chicken
Elizabeth (Hwy 5)	North Point Mall	South Loop
Big Chicken	Windward	Delk Road
South Loop		Windy Hill
Delk Road		Cumberland
Windy Hill		Galleria
Cumberland		Powers Ferry
		Northside Drive
		Roswell Road
		GA 400/Hammond
		Dunwoody
		Perimeter East
		Shallowford
		Doraville

5.2 Bus Operations

5.2.1 Non-Guideway Park-Ride Lots

Existing park-ride lots that are assumed to be used in conjunction with bus operations are located at:

- Canton (SR 5 Business north of Etowah River)
- GA 400 and Mansell Road
- I-985 and SR 20
- I-85 and Indian Trail Road

Table 5.2-1 lists three currently authorized and twelve additional Alternative 3 park-ride lot investments that would further facilitate transit travel and carpooling in the Northern Sub-Area. Current project status in the RTP and 2003-2005 Transportation Improvement Program (TIP) is listed also. The three newly proposed park-ride lots at I-85/Hamilton Mill Road, Buford Hwy/Lawrenceville-Suwanee, and I-85/SR 20 were included from projects identified in the Gwinnett County Comprehensive Transportation Plan. The search area locations for the park-ride lot investments generally provide auto intercept points at key arterials crossing I-75, I-575, GA 400, and I-85.

Table 5.2-1 | Alternative 3 – Park-Ride Lot Investments

ARC Number	Project Description	RTP/TIP Status
CO-AR-290	I-75 & Lake Acworth Drive/Cowan Road Park-Ride Lot	Authorized
AR-339B	SR 140 & SR 20 (Canton) Park-Ride Lot	RTP (2006-2010)
CH-AR-227	I-575 & Dupree Road Park-Ride Lot	RTP (2006-2010)
AR-339B	West Roswell (SR 92 & King/Woodstock roads) Park-Ride Lot(s)	RTP (2006-2010)
AR-339A	East Roswell (Holcomb Bridge Road & Nesbit Ferry Road, etc.) Park-Ride Lot(s)	2003-2005 TIP
FN-AR-189	GA 400 & Old Milton Parkway (SR 120) Park-Ride Lot	RTP (2011-2015)
AR-339A	GA 400 & McFarland Road Park-Ride Lot	2003-2005 TIP
AR-339A	Downtown Cumming Park-Ride Lot	2003-2005 TIP
AR-339A	GA 400 & Old Atlanta Road Park-Ride Lot (incl. ramps to GA 400)	2003-2005 TIP
AR-339A	SR 141 & McGinnis Ferry Road Park-Ride Lot	2003-2005 TIP
	Buford Hwy & Lawrenceville-Suwanee Road Park-Ride Lot	Proposed
	I-85 & Hamilton Mill Road Park-Ride Lot	Proposed
	I-85 & SR 20 Park-Ride Lot	Proposed
GW-AR-232	I-85 & Sugarloaf Parkway (Discover Mills) Park-Ride Lot	Authorized
GW-AR-231	SR 316 & Collins Hill Road Park-Ride Lot	Authorized

5.2.2 Bus Route Operations (Modifications to the RTP Limited Update)

The Alternative 3 bus operating plans reflect refinements to routes already included in the RTP network and the addition of routes identified in local plans but not included in the RTP. Route changes can be categorized as follows:

- Select routes are modified to more effectively connect with stations on the Northwest and North fixed guideways.
- Route alignments are modified to connect to new stations on the added I-285 fixed guideway.
- New local routes are added from Alpharetta, Roswell, Fulton County, and Gwinnett County local plans that had not been previously included in the RTP.
- Existing transit services in Canton and Cumming are added.

- New circulator routes are added (from studies completed for transportation management associations and local governments) in major activity centers including Perimeter Center, Town Center, and Gwinnett Place.
- Service on select routes or portions of routes are eliminated in instances where the service directly competes with the fixed guideways.
- Service frequencies are modified on several routes. Service frequencies are reduced on routes that parallel fixed guideways. Service frequencies are improved on routes that feed fixed guideway stations.
- New express routes are added from Gwinnett County local plans that had not been previously included in the RTP.

Alternative 3 includes 64 local-service bus routes and 25 express-service bus routes in the Northern Sub-Area. The bus routes provide 2,472 route miles of service in the Northern Sub-Area. About 50 percent of Northern Sub-Area households and 64 percent of Northern Sub-Area jobs are within 0.4 mile of a transit station or stop (compared to 43 percent of households and 60 percent of jobs in the Baseline Alternative). The percent of commute trips that could use transit increases to 45 percent (compared to 39 percent in the Baseline Alternative).

The proposed route modifications are described below.

5.2.2.1 Local Service Routes

Cobb/Cherokee

Route CO 10 Cobb Parkway

This Cobb Community Transit (CCT) route presently provides local service on South Marietta Parkway and Cobb Parkway between the Marietta transit center and the Atlanta City Limits, and then operates closed-door via Northside Parkway and I-75 to the MARTA Arts Center station. Since this route would duplicate service on the Northwest Fixed Guideway, the routing is modified to provide local service along Cobb Parkway between the Big Chicken station and the Cumberland station. Headway is modified to 16-minute peak frequencies (RTP has 15).

Station Connections: Big Chicken, South Loop, Delk Road, Windy Hill, Cumberland

Route CO 15 Windy Hill Road

This CCT route presently provides service between the Marietta transit center and Wildwood Office Park via downtown Marietta, Powder Springs Road, Austell Road, and Windy Hill Road. The route is not in the RTP network, but is added back into Alternative 3 and modified on its east end to extend to the Powers Ferry station. Starting from the Windy Hill station, the route runs east on Windy Hill Road, north and west along Powers Ferry Road and the South SR 120 Loop, south on Powder Springs Road, County Services Parkway, and Austell

Road, east on Windy Hill Road, south and east on Interstate North Parkway to the Powers Ferry station, and north on Powers Ferry Road returning to the Windy Hill station to create a loop route with peak frequencies of 32 minutes in each direction.

Station Connections: Windy Hill, South Loop, Powers Ferry

Route CO 20 South Cobb Drive

This route builds on existing CCT route 20. The route starts at Cumberland station, runs west via Cumberland Boulevard, Spring Road, and Concord Road; north on South Cobb Parkway and Fairground Street; east on South Marietta Parkway; and then extends south on Franklin Road, east on Delk Road, south on Powers Ferry Road, and west on Terrell Mill Road to the Windy Hill station. Peak frequencies remain at 30 minutes.

Station Connections: Cumberland, South Loop, Windy Hill

Route CO 20A Highlands Parkway

This route builds on existing CCT route 20A. The route starts at Cumberland station, runs west via Cumberland Boulevard, Spring Road, and Concord Road; south on South Cobb Parkway; and ends in loop via Highlands Parkway, Highlands Ridge Road, and East-West Connector back to South Cobb Parkway. Peak frequencies remain at 60 minutes.

Station Connection: Cumberland

Route CO 45 Barrett Parkway

This CCT route presently provides service between the Marietta transit center and Town Center mall. The route is modified as follows: from the South Loop station the route runs on South Marietta Parkway to downtown Marietta, SR 5 to Elizabeth station, and then Cobb Parkway and Barrett Parkway to the Town Center station. Headway is modified to 16-minute peak frequencies (RTP has 60).

Station Connections: South Loop, Elizabeth (Hwy 5), Town Center

Route CO 50 Powers Ferry Road

Eliminate this existing CCT route.

Route CO 60 Johnson Ferry Road

This existing CCT route provides peak period service between the Marietta transit center and the MARTA Dunwoody station via South Marietta Parkway, Cobb Parkway, SR 120, Johnson Ferry Road, Sandy Springs Circle, and Hammond Drive. On its west end the route is modified to end at the Big Chicken station. On its east end the route is modified to end at the MARTA Sandy Springs station via Johnson Ferry Road and Abernathy Road. Headway is modified to 32-minute peak frequencies (RTP has 90).

Station Connections: Big Chicken, MARTA Sandy Springs

Route CO 65 Roswell Road

Eliminate this existing CCT route.

Route CO 197

This RTP route serving the Johnson Ferry Road corridor is modified on its north end to extend east on SR 92 to the West Roswell Park-Ride lot at SR 92 and King/Woodstock roads, and on its south end to tie into the MARTA Sandy Springs station via Johnson Ferry Road and Abernathy Road. Peak frequencies remain at 20 minutes.

Station Connection: MARTA Sandy Springs

Route CO 202

There is no change in alignment to this RTP route west of the Town Center station. The alignment is then extended east of the station on Barrett Parkway and Piedmont Road, north on Sandy Plains Road, east on Post Oak Tritt Road, and north on Johnson Ferry Road ending at Shallowford Road. Peak frequencies remain at 20 minutes.

Station Connection: Town Center

Route CO 203

This RTP route is modified on the east end of alignment to start from Powers Ferry station. Peak frequencies remain at 20 minutes.

Station Connections: Elizabeth, Delk Road, Powers Ferry

Route CO 207

This RTP route serving the SR 120 corridor is modified to create a 207A and 207B route pattern. The 207A route pattern is the same as the one in the RTP network but with service extended to North Point Mall. Headway is modified to 16-minute peak frequencies (RTP has five). The 207B is a short turn, with service between the Big Chicken station and the North Point Mall station and is operated at 16-minute peak frequencies, to provide a combined eight minute peak frequency.

Station Connections: Big Chicken, GA 400/Holcomb Bridge, North Point Mall

Route CO 208

This RTP route is modified on its east end to feed to the MARTA Dunwoody station via Johnson Ferry Road and Hammond Drive. Headway is modified to 32-minute peak frequencies (RTP has 30).

Station Connections: Big Chicken, MARTA Dunwoody

Route CO 209

There is no change in alignment to this RTP route in south portion of route, but service is terminated at Cumberland. Peak frequencies remain at twelve minutes.

Station Connection: Cumberland

Route CO 210

This RTP route operates from Holmes MARTA station to downtown Kennesaw. The routing in the Study Area is via I-285, South Cobb Parkway, Fairground Street, and Cobb Parkway to Elizabeth station. From Elizabeth station the route

continues north on Cobb Parkway, east on McCollum Parkway, north on South Main Street to downtown Kennesaw, and loops back to Cobb Parkway via Cherokee Street and McCollum Parkway. Headway is modified to 15-minute peak frequencies (RTP has 12).

Station Connections: MARTA Holmes, Elizabeth (Hwy 5)

Route CO 211

This RTP route starts at the Acworth Park-Ride lot at Lake Acworth Drive/Cowan Road, runs south on Cowan Road, east on Hickory Grove Road, and south on Wade Green Road. From Wade Green Road, the route runs east on Shiloh Road, south on Busbee Parkway, Frey Road, Chastain Road and Busbee Parkway to the Town Center station. From the Town Center station the RTP route is modified to run east on Earnest Barrett Parkway, north on Bells Ferry Road, east on Shallowford Road, Jamerson Road, Wigley Road, north on Sandy Plains Road, and east on SR 92 to the West Roswell Park-Ride lot at SR 92 and King/Woodstock roads. Peak frequencies remain at 30 minutes.

Station Connection: Town Center

Route CO 212

There is no change in alignment to this RTP route. Peak frequencies remain at 30 minutes.

Station Connections: Elizabeth (Hwy 5)

Route CO 213

There is no change in alignment to this RTP route. Headway is modified to 30-minute peak frequencies (RTP has five).

Station Connection: Cumberland

Route CO 214

There is no change in alignment to this RTP route except on its north end, terminate route at Shallowford Road. Headway is modified to 30-minute peak frequencies (RTP has 20).

Station Connection: Windy Hill

Route CO 215

There is no change in alignment to this RTP route. Peak frequencies remain at 30 minutes.

Station Connection: Town Center

Route CO 217

There is no change in alignment to this RTP route. Peak frequencies remain at 15 minutes.

Station Connections: None

Route CO 218

There is no change in alignment to this RTP route. Peak frequencies remain at 15 minutes.

Station Connection: Elizabeth (Hwy 5)

Route 12 Howell Mill

This existing MARTA route is extended north on Cobb Parkway to the Cumberland station. Headway is modified to 16-minute peak frequencies (RTP has 20).

Station Connection: Cumberland

New Route TC1

Town Center Circulator North/East – This is a new circulator route on the north and east side of Town Center. The route runs from Town Center station north on Busbee Parkway, west on Chastain Road, circulates through Town Point Center Commercial Park, east on Chastain Road, south on Chastain Meadows Parkway, and west on Barrett Parkway returning to Town Center station. This route operates at eight-minute peak frequencies as a one-way loop.

Station Connection: Town Center

New Route TC2

Town Center Circulator West – This is a new circulator route on the west side of Town Center. The route runs from Town Center station north on Busbee Parkway, west on new connector road across I-75, south on Barrett Lakes Boulevard, west on Cobb Place Boulevard and Roberts Parkway, south on Cobb Parkway, north on Greers Chapel Road and Barrett Lakes Boulevard returning to Town Center station via connector road and Busbee Parkway. This route operates at eight-minute peak frequencies as a one-way loop.

Station Connection: Town Center

Route 125 Canton

This RTP route operates from Canton and Holly Springs to the I-575 & Dupree Road Park-Ride lot (Towne Lake), and then to the MARTA North Springs station via Marietta Hwy, Holly Springs Parkway, Old Hwy 5, Main Street, Dupree Road, SR 92, Mansell Road, and GA 400. The RTP alignment is modified to run

from SR 92 to SR 140 and end at the GA 400/Holcomb Bridge station. Peak frequencies remain at 30 minutes.

Station Connection: GA 400/Holcomb Bridge

New Routes CanCirc1 and CanCirc2

Canton Circulators – These two routes represent the existing service coverage in Canton. These routes would operate at 30-minute peak frequencies and two-direction service would be provided (existing service level is 60-minute midday service only).

Station Connections: None

North Fulton/Forsyth

Route 85 Holcomb

In the RTP, this existing MARTA route operates from the MARTA North Springs station to the GA 400/ Holcomb Bridge station. In Alternative 3, the route is modified to run between the MARTA North Springs station and the North Point Mall station via GA 400, Northridge Road, Dunwoody Place, and Hwy 9 through Roswell and Alpharetta. From downtown Alpharetta, the route would run east on SR 120 (with stop at GA 400 and Old Milton Parkway Park-Ride lot), south on Kimball Bridge Road and North Point Parkway to the North Point Mall station. Headway is modified to 16-minute peak frequencies (RTP has 60).

Station Connections: MARTA North Springs, North Point Mall

Route 85 Roswl/A

Eliminate route from network.

Route 140 Haynes

This existing MARTA route presently provides local service from Alpharetta to the Mansell park-ride lot and then operates express to the MARTA North Springs station. Eliminate route since duplicates fixed guideway service. The local service segment of the route north of the fixed guideway is provided by proposed new routes NPCIRC and WIND described below.

Route 140 N Alph

This existing MARTA route presently provides local service from north Fulton County to the Mansell park-ride lot and then operates express to the MARTA North Springs station. In Alternative 3, the route is modified to provide local service in north Fulton County and connect to Windward and North Point Mall stations. The route would still start at Deerfield Parkway and Morris Road making a loop via Deerfield Parkway, Webb Road, and Morris Road. Then the route would run south on Deerfield Parkway, east on Windward Parkway, and south on North Point Parkway connecting to the Windward station. Then the

route would continue south on North Point Parkway, east on Old Milton Parkway, south on Kimball Bridge Road and North Point Parkway to the North Point Mall station. Headway is modified to 16-minute peak frequencies (RTP has 10).

Station Connections: Windward, North Point Mall

New Route NPCIRC

North Point Circulator – This is a new route that starts at the North Point Mall station. The route runs south on North Point Parkway, west on Mansell Road, north on the Westside Parkway and east on Haynes Bridge Road. Two-direction service would be provided. This route operates at eight minute peak frequencies.

Station Connection: North Point Mall

New Route WIND

Windward-North Point Mall – This is a new route that starts at the Windward station and runs east on Windward Parkway, north on Union Hill Road, east on McGinnis Ferry Road, west on Windward Parkway to the Windward station. The route then continues west on Windward Parkway; south on Hwy 9, Maxwell Road, and Westside Parkway; and east on Center Bridge Road to the North Point Mall station. This route operates at 24-minute peak frequencies.

Station Connections: Windward, North Point Mall

New Route ALP-MANS

Alpharetta-Mansell – This is a new route that provides service in the Alpharetta and Mansell employment areas west of GA 400. On the north end, the route loops by Windward station via Windward Parkway, North Point Parkway, Webb Bridge Road, and planned Westside Parkway extension. From Webb Bridge Road to the south, the route runs southwest on planned Westside Parkway extension, existing Westside Parkway, Morrison Parkway, and Hembree Road. Then the route runs south on Old Roswell Road and east on Holcomb Bridge Road to the GA 400/Holcomb Bridge station. This route operates at 24-minute peak frequencies in both directions.

Station Connections: Windward, GA 400/Holcomb Bridge

New Route SB-PH

State Bridge-Pleasant Hill – This is a new route that starts at the North Point Mall station and runs north on North Point Parkway, east on SR 120, State Bridge Road, Pleasant Hill Road, and Satellite Boulevard to the Gwinnett County Transit transfer center at Gwinnett Place Mall. This route operates at 30-minute peak frequencies.

Station Connection: North Point Mall

New Route CUMMCIRC

Cumming Circulator – This is a new circulator route that provides a representation of existing demand response service in the Cumming and central Forsyth County commercial areas. The route starts at SR 20 and Nuckolls Road and runs west on SR 20, north on Market Place Drive, west on Buford Dam Road, and north on Atlanta Road (Hwy 9) to circulate in downtown Cumming; then the route runs south on Castleberry Road, stopping at the downtown Cumming park-ride lot, east on Hutchinson Road, north on Hwy 9, and east on SR 20 returning to Nuckolls Road. This route operates at 30-minute peak frequencies, with two-direction service on the loop.

Station Connections: None

I-285/Perimeter Center

Route 5 Sandy Springs

This existing MARTA route runs from the MARTA Lindbergh Center station to Sandy Springs via Piedmont Road and Roswell Road. The route is terminated on the north end at the Roswell Road station on the I-285 Fixed Guideway. Headway is modified to 16-minute peak frequencies (RTP has 8).

Station Connections: MARTA Lindbergh Center, Roswell Road

Route 41 Windsor Parkway

This existing MARTA route presently connects to the MARTA Medical Center station and serves the Lake Hearn office development area. A new Perimeter Center Circulator Route PC-2 (described below) would cover this part of the service area. On the north end of the route, the routing would be modified as follows: At Glenridge Drive and Johnson Ferry Road, the route runs north on the Glenridge Connector and Glenridge Drive, east and south on Glenridge Parkway, east on Abernathy Road, and north on Peachtree-Dunwoody Road to the MARTA North Springs station. The route would also connect to stops on the Sandy Springs-Perimeter People Mover guideway. Headway is modified to 24-minute peak frequencies (RTP has 45).

Station Connections: MARTA Brookhaven, MARTA North Springs

Route 87 Roswell Road

This existing MARTA route would be modified to begin at the North Point Mall station and run south on North Point Parkway, west on Mansell Road, south on Dogwood Road extension, and east on Holcomb Bridge Road to GA 400/Holcomb Bridge station. Then the route would run south on Dogwood Road, Riverside Road, and Roswell Road; and end at the Roswell Road/Mt.

Vernon Hwy stop on the Sandy Springs People Mover guideway. Headway is modified to 16-minute peak frequencies (RTP has 12).

Station Connections: North Point Mall, GA 400/Holcomb Bridge

Route 148 Powers Ferry

There is no change in alignment to this existing MARTA route, except on the Sandy Springs end of the route where the route is terminated at the Roswell Road/Mt. Vernon Hwy stop on the Sandy Springs People Mover guideway. The route connects to the Northside Drive station on the I-285 Fixed Guideway. Headway is modified to 32-minute peak frequencies (RTP has 35).

Station Connection: Northside Drive

Route 150 Perimeter East

This existing MARTA route is modified to provide service between the Perimeter Center east area and the Dunwoody Village area. The route starts at the MARTA Dunwoody station and runs east on Hammond Drive and north on Ashford-Dunwoody Road and Mt. Vernon Hwy to Dunwoody Village. The existing service in the Perimeter Center East area would be covered by the new Perimeter Center Circulator Route PC-1 (described below). Headway is modified to 24-minute peak frequencies (RTP has 20).

Station Connection: MARTA Dunwoody

New Route PC1

Perimeter Center Circulator 1 – This new circulator route would operate as a two-way loop connecting the MARTA Sandy Springs and Dunwoody stations and the Perimeter East station on the I-285 Fixed Guideway. The route would circulate by developments in and along Perimeter Center West, Crown Pointe Parkway, Meadow Lane Road, Perimeter Center North, Perimeter Center East, Ravinia, Hammond Drive, Concourse, and Perimeter Center West. A short “bus access only” connecting road would be built between the Ravinia office development and the Perimeter Center East office development so that the buses would not have to turn around and go back out to Ashford-Dunwoody Road. Two-direction service would be provided. This route operates at eight-minute peak frequencies.

Station Connections: MARTA Sandy Springs and Dunwoody, Perimeter East

New Route PC2

Perimeter Center Circulator 2 – This new circulator route would be anchored at the MARTA Medical Center station with two loops. The first loop would serve the Lake Hearn/Perimeter Summit developments via Lake Hearn Drive,

Parkside Place, and Perimeter Summit Parkway. A second loop would serve the medical center area via Peachtree-Dunwoody Road, Hollis Cobb Circle, Johnson Ferry Road, Glenridge Connector and Peachtree-Dunwoody Road. Two-direction service would be provided. This route operates at eight-minute peak frequencies.

Station Connection: MARTA Medical Center

Route 129 Chamblee-Dunwoody

There is no change in alignment to this existing MARTA route. Headway is modified to 24-minute peak frequencies (RTP has 40).

Station Connections: MARTA North Springs, Sandy Springs, and Chamblee

Route 135 NSHFRD

North Shallowford – There is no change in alignment to this existing MARTA route; stop is added at the Shallowford station. Peak frequencies remain at 30 minutes.

Station Connections: MARTA Chamblee, Shallowford

Route 132 Tilly Mill

There is no change in alignment to this existing MARTA route. Peak frequencies remain at 24 minutes.

Station Connection: MARTA Chamblee

Route 25 PID

Peachtree Industrial – There is no change in alignment to this existing MARTA route. Peak frequencies remain at 24 minutes.

Station Connection: MARTA Chamblee, Brookhaven, and Lenox

Route 91 Henderson Mill

There is no change in alignment to this existing MARTA route. Peak frequencies remain at 25 minutes.

Station Connections: MARTA Brookhaven and Doraville

Route 124 Chamblee-Tucker

There is no change in alignment to this existing MARTA route. Peak frequencies remain at 21 minutes.

Station Connections: MARTA Doraville and Chamblee

Gwinnett County

Route GW 10E/10W

There is no change in alignment (as represented in the RTP) to this existing Gwinnett County Transit (GCT) route. Headway is modified to 7.5-minute peak frequencies (RTP has 15).

Station Connections: MARTA Doraville

Route GW 50 BUF

There is no change in alignment (as represented in the RTP) to this existing GCT route. The route also stops at the I-985/SR 20 Park-Ride lot. Headway is modified to 30-minute peak frequencies (RTP has 60).

Station Connections: None

Route GW 20

This GCT route is modified in Alternative 3 to reflect the present alignment of the route as implemented in November 2002: west of Indian Trail Road/I-85, the route remains the same as coded in RTP; east of Indian Trail Road/I-85, the route crosses to north side of I-85 and connects to the Indian Trail Park-Ride lot, runs east on Beaver Ruin Road and Satellite Boulevard to the GCT transfer center at Gwinnett Place Mall. Peak frequencies remain at 30 minutes.

Station Connections: None

Route GW 30

This GCT route is modified in Alternative 3 to reflect the present alignment of the route as implemented in November 2002: west of the Indian Trail Road/Beaver Ruin Road intersection, the route remains the same as coded in RTP; east of the Indian Trail Road/Beaver Ruin Road intersection, the route runs south on Indian Trail Road, connects to the Indian Trail Park-Ride lot; and then continues south on Indian Trail Road, east on Steve Reynolds Boulevard and Club Drive, north on Pleasant Hill Road, east on Breckinridge Boulevard, north on Old Norcross Road, and west on Satellite Boulevard to the GCT transfer center at Gwinnett Place Mall. Peak frequencies remain at 30 minutes.

Station Connections: None

Route GW 40

There is no change in alignment to this existing GCT route which provides service between the GCT transfer center at Gwinnett Place Mall, Discover Mills, and Lawrenceville. Peak frequencies remain at 30 minutes.

Station Connections: None

Route GW 60

This planned GCT route provides service between south Gwinnett and Duluth with intermediate connections to the GCT transfer center at Gwinnett Place Mall. There is no change in RTP alignment north of I-85. South of I-85, the alignment is modified from its RTP routing to connect to the Lilburn commuter rail station via Beaver Run road, Steve Reynolds Boulevard, Indian Trail Road, and Killian Hill Road. The alignment south of the Lilburn commuter rail station returns to the RTP routing. Peak frequencies remain at 60 minutes.

Station Connection: Lilburn commuter rail

Route GW 70

There is no change in alignment to this planned GCT route from the Mall of Georgia to Lawrenceville, and then to Snellville and Park Place via SR 20, SR 124, and Hwy 78. Headway is modified to 30-minute peak frequencies (RTP has 60).

Station Connections: None

Route GW 80

This planned route, included in the Gwinnett County Comprehensive Transportation Plan (CTP) and RTP, runs from the GCT transfer center at Gwinnett Place Mall to Discover Mills, and then to the Dacula commuter rail station. Peak frequencies remain at 30 minutes.

Station Connection: Dacula commuter rail

Route GW 85

Eliminate this route.

Route GW 90

This planned route, included in the Gwinnett County CTP and RTP, runs from the GCT transfer center at Gwinnett Place Mall to the Ronald Reagan commuter rail station, and then to Snellville. There is no change in RTP alignment. Peak frequencies remain at 30 minutes.

Station Connection: Ronald Reagan commuter rail

New Route GW 15

This planned route, included in the Gwinnett County CTP, starts at the GCT transfer center at Gwinnett Place Mall and runs to Discover Mills via Old Norcross Road and Breckinridge Boulevard. Then the route runs to the Mall of Georgia via North Brown Road, Old Peachtree Road, Lawrenceville-Suwanee Road, Satellite Boulevard (and its planned extension to SR 20), and SR 20. The

route also stops at the I-985/SR 20 Park-Ride lot. This route operates at 30-minute peak frequencies.

Station Connections: None

New Route GW 25

This planned route, included in the Gwinnett County CTP, starts at the Norcross transit center and runs to Centerville in south Gwinnett via Jimmy Carter Boulevard, Rockbridge Road, West Park Place Boulevard, Rockbridge Road, and Annistown Road. This route operates at 30-minute peak frequencies.

Station Connections: None

New Route GW 35

This planned route, included in the Gwinnett County CTP, starts at the Buford Highway and Lawrenceville-Suwanee Park-Ride lot and runs south via Buford Highway and Sugarloaf Parkway to a planned park-ride lot at Sugarloaf Parkway and SR 20, with an intermediate connection to the Lawrenceville commuter rail station. This route operates at 30-minute peak frequencies.

Station Connections: Lawrenceville commuter rail

New Route GW 45

This planned route, included in the Gwinnett County CTP, provides local service between the commuter rail stations from Tucker to Dacula, via Hwy 29 and local access streets. This route operates at 30-minute peak frequencies.

Station Connections: Tucker, Lilburn, Ronald Reagan, Lawrenceville, and Dacula commuter rail

New Route GW 55

This planned route, included in the Gwinnett County CTP, starts at the Buford Highway & Lawrenceville-Suwanee park-ride lot and runs south to GJAC transit center in Lawrenceville via Lawrenceville-Suwanee Road, Professional Drive (through Gwinnett Medical Center), SR 120, and Langley Drive. This route operates at 30-minute peak frequencies.

Station Connections: none

New Route GW 65

This planned route, included in the Gwinnett County CTP, starts at the Tucker commuter rail station and runs to Peachtree Corners, via Jimmy Carter Boulevard and Peachtree Parkway. This route operates at 30-minute peak frequencies.

Station Connection: Tucker commuter rail

New Route GW 75

This planned route, included in the Gwinnett County CTP, provides service between Dacula, Gwinnett University Center, and Mall of Georgia. The route starts in Dacula (Hwy 29 and Harbins Road) and runs to the Dacula commuter rail station via Hwy 29 and SR 316. The route continues on SR 316 to Collins Hill Road and the Gwinnett University Center. The route then returns to SR 20 via SR 316 and runs north on SR 20 to the Mall of Georgia. This route operates at 30-minute peak frequencies.

Station Connection: Dacula commuter rail

New Route LCIGWNT

LCI Gwinnett Circulator – This is a new route, identified as part of a Livable Centers’ Initiative (LCI) study undertaken by Gwinnett County for this major activity center, which provides circulator service in the Gwinnett Place Mall and Discover Mills area. Starting at Steve Reynolds Boulevard, the route runs east and north on the east side of I-85 via Club Drive, Sweetwater Road, Old Norcross Road, and Breckenridge Boulevard to Discover Mills. The route crosses I-85 on Sugarloaf Parkway, then runs on the west side of I-85 via Satellite Boulevard, Commerce Avenue, Ring Road, Venture Parkway, Pleasant Hill Road, Satellite Boulevard, and returns to Steve Reynolds Boulevard. Two-direction service would be provided. This route operates at eight-minute peak frequencies.

Station Connections: None

5.2.2.2 Express Service Routes

Route CO 70 Perimeter/Cumberland/Holmes

This existing CCT express route provides peak period and midday service in both directions between Cumberland and the MARTA Holmes station. In Alternative 3, the route is extended from Cumberland to the Perimeter Center area via the I-285 HOV lanes or busway (if the I-285 Fixed Guideway is BRT). In the Perimeter Center area, the route would terminate at the Dunwoody station. Peak frequencies remain at 60 minutes.

Station Connections: MARTA Holmes, Cumberland, MARTA Dunwoody

Route GR 400

This planned RTAP express route provides peak period and midday service in both directions (the RTP models peak period, peak direction service only). The RTP alignment is modified to feed the North Point Mall station from two planned park-ride lots in Cumming/central Forsyth County. In the a.m. peak direction, the route starts at the downtown Cumming Park-Ride lot and runs south on Castleberry Road, east on Hutchinson Road (Hutchinson Road is being upgraded and realigned to intersect Hwy 9 at Old Atlanta Road), and east on Old Atlanta Road to the GA 400 and Old Atlanta Road park-ride lot. The route

then accesses GA 400 and runs express to the North Point Mall station using planned HOV ramps at Center Bridge Road. In the reverse commute direction, the route will run from the North Point Mall station north on GA 400 to the SR 20 interchange, east on SR 20, north on Market Place Drive, west on Buford Dam Road, and north on Hwy 9 to downtown Cumming. Peak frequencies remain at 30 minutes.

There is no access to GA 400 at Old Atlanta Road. However, this could be a candidate site for future HOV access ramps if HOV lanes are extended to Cumming from the current planned end at McFarland Road. For the interim operation, it may be possible to provide temporary half-diamond ramps on the south side of the Old Atlanta Road overpass as part of the GA 400 and Old Atlanta Road park-ride lot project.

Station Connection: North Point Mall

Route GR 401

Eliminate this route.

Route GR 407

This planned RTAP express route is modified to provide peak period, peak direction service only from the GA 400 and McFarland Road park-ride lot to the North Point Mall station and the Cumberland station (the RTP models service in both directions). Peak frequencies remain at 30 minutes.

Station Connection: North Point Mall, Cumberland

Route GR 408

This planned RTAP limited stop, arterial route provides peak period and midday service in both directions in the SR 141 corridor. The RTAP and RTP alignment would be modified to start from Johns Creek in south Forsyth/north Fulton to the MARTA Doraville station (the RTP and Alternative 1 model peak direction service only). The route would start at the SR 141 and McGinnis Ferry Road Park Ride lot. Stops should be one-half to one mile apart including stops at neighborhood-scale park-ride lots at Abbotts Bridge Road, State Bridge Road, Peachtree Corners Circle, and Holcomb Bridge Road. The route would continue south via Peachtree Industrial Boulevard, Winters Chapel Road, Oakcliff Road, and New Peachtree Road ending at the MARTA Doraville station. Peak frequencies remain at 30 minutes.

Station Connection: MARTA Doraville

Route GR 409

This planned RTAP limited stop, arterial route provides peak period and midday service in both directions in the Holcomb Bridge Road corridor. Several neighborhood-scale park-ride lots are planned (either new construction or lease existing lots) at key intersections along Holcomb Bridge Road. Stops should be one-half to one mile apart. The RTP alignment is modified to begin at the GA 400/Holcomb Bridge station. Headway is modified to 30-minute peak frequencies (RTP has 15).

Station Connections: GA 400/Holcomb Bridge, MARTA Doraville

Route GR 410

This planned RTAP express route provides peak period service only in both directions. The route operates from Discover Mills to the MARTA Lindbergh station via Sugarloaf Parkway, I-85 HOV lanes, and Lindbergh Drive. Peak frequencies remain at 30 minutes.

Station Connections: MARTA Lindbergh

Route GR 412

This planned RTAP express route is modified in Alternative 3 to provide peak period and midday service in both directions from Discover Mills to Midtown Atlanta (the RTP provides peak period, peak direction and midday service). Peak frequencies remain at 30 minutes.

Station Connections: MARTA North Avenue

Route GR 413

This planned RTAP express route provides peak period, peak direction service only from Lawrenceville to Perimeter Center. Eliminate route since it duplicates service provided by new routes GW 105, GW 107, and GW 111 described below.

Route GR 428

Eliminate this route.

Route GR 467

This planned RTAP express route provides peak period, peak direction service only from the Douglasville multi-modal terminal to the Cumberland station via I-20, I-285, Paces Ferry Road, Cumberland Parkway, and Cumberland Boulevard (the RTP models service in both directions). Peak frequencies remain at 30 minutes.

Station Connection: Cumberland

Route GR 477

This planned RTAP express route provides peak period, peak direction service only (the RTP models service in both directions). The route operates from an existing park-ride lot in Dallas and planned RTAP park-ride lots in east Paulding County and Powder Springs via Hwy 278 and the East-West Connector. Peak frequencies remain at 30 minutes.

Station Connections: Cumberland

Route GR 480

This planned RTAP express route provides peak period and midday service in both directions from Town Center to Midtown (the RTP models peak direction service only). Eliminate route since it duplicates fixed guideway service.

Route GR 481

This planned RTAP express route provides peak period, peak direction service only from Acworth to Midtown (the RTP and Alternative 3 model service in both directions; Alternative 3 also provides midday service). The route is modified to begin at the Acworth Park-Ride lot and run to Town Center. Peak frequencies remain at 30 minutes.

Station Connection: Town Center

Route GR 483

This planned RTAP limited stop, arterial route provides peak period and midday service in both directions from Marietta to Perimeter Center via SR 120 and Johnson Ferry Road (the RTP models peak period, peak direction service only). Eliminate route since it duplicates fixed guideway service. The local stop service continues to be provided by routes CO 208 and CO 197 on SR 120 and Johnson Ferry Road described above.

Route GR 485

This planned RTAP express route provides peak period and midday service in both directions. The route operates from Cumberland to Hartsfield via I-285 and then continues to the existing MARTA Flat Shoals park-ride lot in south Fulton County. There is no change to RTP routing. Peak frequencies remain at 30 minutes.

Station Connections: Cumberland

Route GR 490

This planned RTAP express route provides peak period, peak direction service only. The RTP alignment is modified to feed the Town Center station from the planned SR 140 and SR 20 (Canton) park-ride lot with an interim stop at the Towne Lake park-ride lot at I-575 and Dupree Road. The route uses the planned

I-575 HOV lanes and accesses the Town Center area via planned HOV ramps at I-575 and Big Shanty Road. Peak frequencies remain at 30 minutes.

Station Connections: Town Center

Route GR 493

This planned RTAP limited stop arterial route provides peak period and midday service in both directions in the SR 92 corridor. Stops are one-half to one mile apart. The route begins at the Towne Lake Park-Ride lot at I-575 and Dupree Road and runs east on SR 92 and Mansell Road, stopping at the West Roswell park-ride lot at SR 92 and King/Woodstock roads and the existing Mansell Road park-ride lot. From the Mansell Road Park-Ride lot, the RTP alignment is modified to continue east on Mansell Road and north on North Point Parkway to the North Point Mall station. Peak frequencies remain at 30 minutes.

Station Connections: North Point Mall

Route GR 497

Eliminate this route.

Route GR 94/CO 94

This RTP route pair provides peak period and midday service in both directions from Marietta to Perimeter Center to Gwinnett Place. Eliminate route pair since it duplicates fixed guideway service on I-75 and I-285, and Gwinnett express bus service to Perimeter Center described below.

Route CO 101

This existing CCT route provides peak period service in both directions from Marietta to downtown Atlanta. The P.M. peak service runs from midtown and downtown Atlanta to Marietta. The reverse commute service runs from midtown and downtown Atlanta to Cumberland and the Wildwood activity centers. In the RTP, midday service in both directions is added. Eliminate route since it duplicates fixed guideway service.

Route GW 101

This existing GCT route provides peak period service in both directions from the I-985 and SR 20 park-ride lot to downtown Atlanta. The reverse commute service runs from midtown and downtown Atlanta to the Mall of Georgia. In the RTP and Alternative 3, midday service in both directions is added. Peak frequencies remain at 30 minutes.

Station Connections: downtown Atlanta – Peachtree Center and Five Points; midtown Atlanta – Civic Center, North Avenue, Midtown, and Arts Center

Route GW 102

This existing GCT route provides peak period service in both directions from the Indian Trail park-ride lot to downtown Atlanta. The reverse commute service runs from midtown and downtown Atlanta to Gwinnett Place Mall via Shackleford Road, Breckinridge Boulevard, SR 120, Satellite Boulevard and Steve Reynolds Boulevard. Peak frequencies remain at 30 minutes.

Station Connections: downtown Atlanta – Peachtree Center and Five Points; midtown Atlanta – Civic Center, North Avenue, Midtown, and Arts Center

Route GW 103

This existing GCT route provides peak period service in both directions from Discover Mills to downtown Atlanta. The reverse commute service runs from midtown and downtown Atlanta to Discover Mills. The RTP alignment is modified to change routing in midtown Atlanta to access midtown and the MARTA Arts Center station via the proposed HOV ramps at 17th Street, and then travel south on Peachtree Street where the route would follow the existing downtown routing. Peak frequencies remain at 30 minutes.

Station Connections: downtown Atlanta – Peachtree Center and Five Points; midtown Atlanta – Civic Center, North Avenue, Midtown, and Arts Center

New route GW 105

This route provides peak period service in both directions from the SR 316 and Collins Hill Road park-ride lot in Lawrenceville to downtown Atlanta via SR 316 and I-85, with reverse commute service to the West SR 316 corridor north (i.e., SR 316, Sugarloaf Parkway, Lakes Parkway, Riverside Parkway, and SR 120 back to SR 316). This route operates at 30-minute peak frequencies.

Station Connections: Downtown Atlanta (Five Points, Peachtree Center, etc.)

New route GW 106

This route provides peak period service in both directions from the I-985 and SR 20 park-ride lot to the MARTA Doraville station via I-985, I-85, I-285, and Buford Highway, with reverse commute service to the Jimmy Carter Boulevard area on the south side of I-85 (i.e., south on Jimmy Carter Boulevard, west on Dawson Boulevard and McDonough Drive, south on Graves Road, east on South Norcross-Tucker Road, north on Thompson Parkway, and west on Live Oak Parkway back to Jimmy Carter Boulevard). This route operates at 30-minute peak frequencies.

Station Connections: MARTA Doraville

New route GW 107

This route provides peak period service in both directions from the I-85 and Indian Trail Road park-ride lot to Perimeter Center via I-85, I-285, and Perimeter Center Parkway, with reverse commute service to the Gwinnett Place Mall area via Shackleford Road, Breckinridge Boulevard, SR 120, Satellite Boulevard and Steve Reynolds Boulevard. This route operates at 30-minute peak frequencies.

Station Connections: MARTA Dunwoody

New route GW 108

This route provides peak period service in both directions from the I-85 and Indian Trail Road park-ride lot to the MARTA Lindbergh station via I-85 and Lindbergh Drive, with reverse commute service to the Gwinnett Place Mall area via Shackleford Road, Breckinridge Boulevard, SR 120, Satellite Boulevard and Steve Reynolds Boulevard. This route operates at 30-minute peak frequencies.

Station Connections: MARTA Lindbergh

New route GW 109

This route provides peak period service in both directions from the SR 316 and Collins Hill Road park-ride lot in Lawrenceville to the MARTA Lindbergh station via SR 316 and I-85, with reverse commute service to the West SR 316 corridor south (i.e., SR 316 to Sugarloaf Parkway, east on Old Norcross Road, north on Lawrenceville-Suwanee Road, east on Professional Drive to Gwinnett Medical Center, and west on SR 120 back to SR 316). This route operates at 30-minute peak frequencies.

Station Connections: MARTA Lindbergh

New route GW 110

This route provides peak period service in both directions from the SR 316 & Drowning Creek Road Park-Ride lot east of Lawrenceville to the Discover Mills Park-Ride lot and transit center via SR 316 and Sugarloaf Parkway, with reverse commute service to the East SR 316 corridor north (i.e. SR 316 to Collins Hill Road to the Gwinnett University Center, back to SR 316 to SR 20, east on Swanson Drive, south on Hi-Hope Road, east on Hurricane Shoals Road, and south on Cedars Road back to SR 316). This route operates at 30-minute peak frequencies.

Station Connections: none

New route GW 111

This route provides peak period service in both directions from the SR 316 and Drowning Creek Road park-ride lot east of Lawrenceville to Perimeter Center via SR 316, I-85, I-285, and Perimeter Center Parkway, with reverse commute service

to the East SR 316 corridor south (i.e., SR 316 to SR 120, west on Professional Drive, south on Lawrenceville-Suwanee Road, east on Old Norcross Road and Hurricane Shoals Road back to SR 316). This route operates at 30-minute peak frequencies.

Station Connections: MARTA Dunwoody

New route GW 112

This route provides peak period service in both directions from the I-85 and Hamilton Mill Road park-ride lot to the Discover Mills Park-Ride lot and transit center via I-85 and Sugarloaf Parkway, with reverse commute service to the Mall of Georgia via I-85 and SR 20. This route operates at 30-minute peak frequencies.

Station Connections: none

New route GW 113

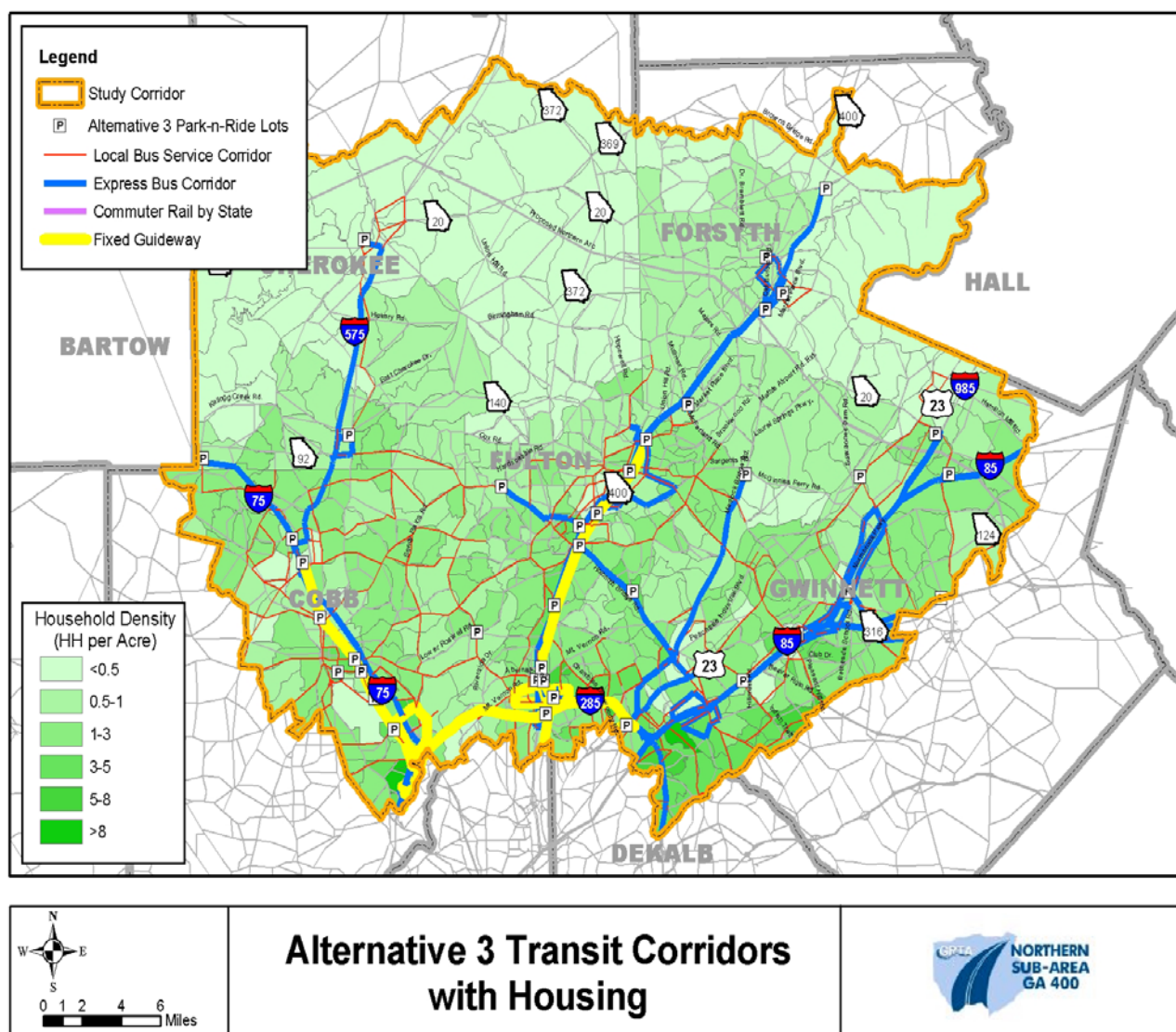
This route provides peak period service in both directions from the I-85 and SR 20 park-ride lot to Perimeter Center via I-85, I-285, and Perimeter Center Parkway, with reverse commute service to the Mall of Georgia via I-85 and SR 20. This route operates at 30-minute peak frequencies.

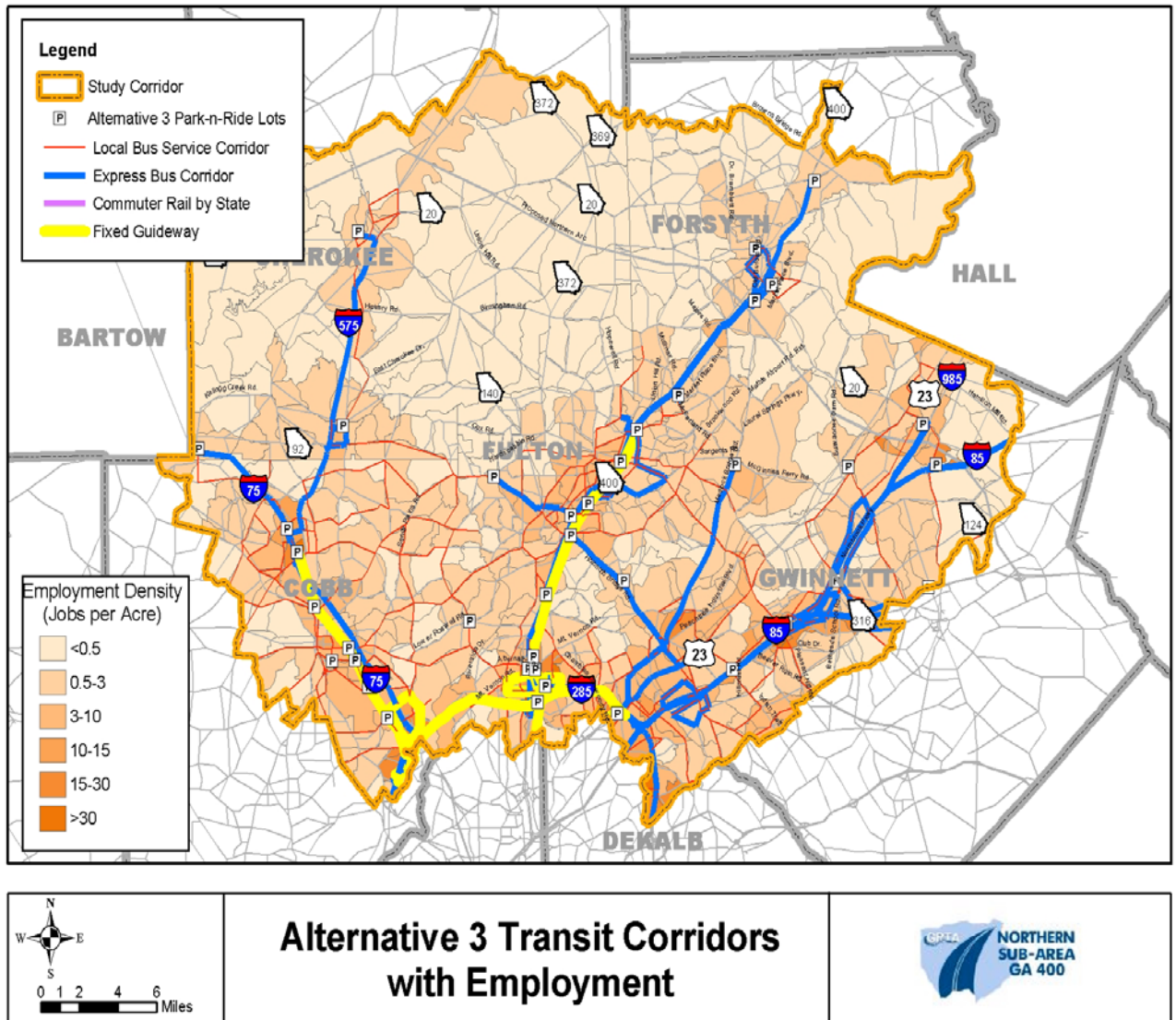
Station Connections: MARTA Dunwoody

Two figures follow that illustrate the fixed guideway, express bus, and local bus corridors defined for Alternative 3 mapped on the local plans' household and employment distributions (with densities scaled-back to control totals consistent with the forecasts established for the 2025 RTP Limited Update).

5.3 Operating Plan Results

Based on the model run, Alternative 3 results in 253,800 daily transit trips being made within, into, or from the Northern Sub-Area. This result represents substantial growth over the 188,100 daily transit trips in the Baseline Alternative. Focusing on commute trips, the transit share of work trip productions is 10.5 percent, an increase of approximately 38 percent. And there is a 0.7 percent increase in average transit travel time per commute trip.





Since the fixed guideways operate as a regional system, the fixed guideway operating plans for each alternative include the operating statistics for the entire region. However, Table 2.3-1 is provided as a “pivot point” operating plan for all alternatives so that the incremental operating statistics attributable to each alternative’s Northern Sub-Area fixed guideways can be easily calculated, if desired. Table 2.3-1 presents 2025 fixed guideway operating statistics for the RTP Limited Update fixed guideways, **excluding the Northwest LRT Line, the North Line extension to Windward Parkway, and the Cumberland People Mover**. In Section 6, this “pivot point” approach is also used in estimating the operating & maintenance (O&M) cost results for fixed guideways attributable only to the Northern Sub-Area. Note that by excluding the entire Northwest LRT line in the “pivot point” table, the Arts Center station to Cumberland station segment is also attributed to the Northern Sub-Area. This is done as there is no effective way to break out the operating statistics of a line segment. Since the Northwest LRT line is assumed in all alternatives, it does not affect the operating characteristics and O&M costs comparisons across the alternatives.

Table 5.3-1 presents the 2025 fixed guideway operating statistics for the RTP fixed guideway system and the increments attributed to Alternative 3. The operating requirements attributed to Alternative 3 for HRT are 29 cars, 7.12 million annual revenue car-miles, and 24,300 annual train-hours; for LRT, 60 cars, 7.08 million annual revenue car-miles, and 59,500 annual train-hours; for BRT, 29 buses, 2.52 million annual bus-miles, and 99,400 annual bus-hours; and for Circulators, 20 cars, 1.4 million annual revenue car-miles, and 79,200 annual car-hours.

Table 5.3-2 presents the 2025 weekday bus operations plan for Alternative 3. This table lists the peak, base, and late evening service levels assumed in Alternative 3. The bus operations plan requires 509 peak buses and provides 91,514 daily bus-miles and 6,234 daily bus-hours of service.

Table 5.3-1 Alternative 3 – Fixed Guideway Operating Plan

2025 HRT Operating Plan

From	To	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
				Peak	base	Sat/eve/late/Sun		Peak	base	Sat/eve/late/Sun		Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)
North-South Line															
Doraville	Airport	40.0	22.2	8	8	10	15	8	8	6	4	96	116	13.63	72.0
Windward Parkway	Airport	57.0	35.7	8	8	10	15	8	8	6	4	128	154	20.41	97.7
Windward Parkway	Lindbergh	31.0	21.6				15				4			0.91	11.0
Trunk Average/Total:				4	4	5	8					224	270	34.95	180.7
East-West Line															
Hightower	Indian Creek	29.0	14.9	8	8	10	15	6	6	5	4	54	65	7.27	54.3
Bankhead	King Mem	10.0	4.1	8	8	10	15	2	2	2	2	8	10	0.74	23.5
Trunk Average/Total:				4	4	5	8					62	75	8.01	77.8
TOTALS												286	345	42.95	258.5
HRT Attributed to Alternative 3												24	29	7.12	24.3

2025 LRT Operating Plan

2020 LRT Operating Plan															
From	To	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
				Peak	Base	Sat/eve/late/Sun		Peak	Base	Sat/eve/late/Sun		Peak	Total	Car-Mi. (million)	Tr-Hrs. (thous.)
DeKalb LRT															
Lindbergh	South DeKalb	28.0	12.4	8	8	10	15	3	2	2	2	27	33	2.57	54.3
Northwest LRT															
Arts Center	Town Center	31.3	21.8	8	8	10	15	5	3	3	3	50	60	7.08	59.5
TOTALS												77	93	9.65	113.8
LRT Attributed to Alternative 3												50	60	7.08	59.5

2025 BRT Operating Plan

From I-285 BRT Cumberland		To Doraville		Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
						Peak	Base	Sat/eve/late/Sun	Peak	Base	Sat/eve/late/Sun	Peak	Total	Bus-Mi. (million)	Bus-Hrs. (thous.)		
				23.8	13.3	8	8	10	15	3	2	2	1	24	29	2.52	99.4
TOTALS														24	29	2.52	99.4
BRT Attributed to Alternative 3														24	29	2.52	99.4

2025 Fixed Route Circulator Operating Plan

	Run Time (min.)	Distance (miles)	Headway				Consist				Vehicles		Annual Statistics:	
			Peak	Base	Sat/eve/late/Sun	Peak	Base	Sat/eve/late/Sun	Peak	Total	Car-Mi. (million)	Car-Hrs. (thous.)		
Cumberland Circulator	16.5	6.8	5	8	10	15	1	1	1	1	10	12	0.72	43.2
Perimeter Ctr Circulator	17.2	7.5	8	8	10	15	1	1	1	1	6	8	0.68	36.0
TOTALS											16	20	1.40	79.2
Circulator Attributed to Alternative 3											16	20	1.40	79.2

Note 1: Ten-minute peak frequencies were modeled for the heavy rail lines, per the current RTP. However, to accommodate load projections on the North and Northeast lines with 8-car trains, 8-minute peak frequencies on all heavy rail lines were assumed for the operating plans.

Note 2: Ten-minute peak frequencies were modeled for the Lindbergh-South DeKalb light rail line, per the current RTP. However, for consistency with the heavy and light rail line frequencies, 8-minute peak frequencies were assumed for the operating plans.

Note 3: For costing purposes, 5-car trains in the peak on the Northwest Line were assumed in order to meet line load projections. An alternative assumption would be 4-car trains with improved frequencies.

Table 5.3-2

Alternative 3 – Average Weekday Bus Operating Plan

**TABLE 5.3-2
ALTERNATIVE 3--AVERAGE WEEKDAY BUS OPERATING PLAN**

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Offpeak	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Local	12 HOWEL	Midtown Sta to Cumberland Sta	1 way	Modified	16	24	30	10.74	66.8	55	8	590.7	60.1
Local	12 HOWEL-	Cumberland Sta to Midtown Sta	1 way	Modified	16	24	30	10.74	59.1	55	8	590.7	53.2
Local	124 CHAMB	Chamblee Sta to Tucker	1 way	No Change	21	30	30	10.08	62.2	45	5	455.0	45.8
Local	124 CHAMB-	Tucker to Chamblee Sta	1 way	No Change	21	30	30	10.08	43.6	45	5	455.0	32.1
Local	129 CHAMBL	Chamblee Sta to N Spgs Sta	1 way	Modified	24	24	30	8.76	47.2	48	4	416.1	36.6
Local	129 CHAMBL-	N Spgs Sta to Chamblee Sta	1 way	Modified	24	24	30	8.76	46.6	48	4	416.1	36.1
Local	132 TILL	Chamblee Sta to Tilly Mill	1 way	No Change	24	24	30	6.54	31.8	48	3	310.7	24.6
Local	132 TILL-	Tilly Mill to Chamblee Sta	1 way	No Change	24	24	30	6.54	37.0	48	3	310.7	28.7
Local	135 NSHFRD	Chamblee Sta to Peeler	1 way	No Change	30	30	60	5.21	26.0	35	2	182.4	15.0
Local	135 NSHFRD-	Peeler to Chamblee Sta	1 way	No Change	30	30	60	5.21	28.1	35	2	182.4	16.2
Local	148 POWER	Sandy Spgs Sta to Northside Dr Sta	1 way	Modified	32	32	60	3.93	20.0	33	2	130.2	10.9
Local	148 POWER-	Northside Dr Sta to Sandy Spgs Sta	1 way	Modified	32	32	60	3.93	23.1	33	2	130.2	12.6
Local	150 PERI	Dunwoody Sta to Dunwoody Village	1 way	Modified	24	24	30	2.47	16.7	48	2	117.3	12.9
Local	150 PERI-	Dunwoody Village to Dunwoody Sta	1 way	Modified	24	24	30	2.47	20.8	48	2	117.3	16.1
Local	25 PID	Lenox Sta to Winters Chapel	1 way	No Change	24	32	32	12.97	66.7	41	6	535.0	44.8
Local	25 PID-	Winters Chapel to Lenox Sta	1 way	No Change	24	32	32	12.97	58.1	41	6	535.0	39.0
Local	41 WINDSOR	Brookhaven Sta to N Springs Sta	1 way	Modified	24	24	30	8.84	48.6	48	4	419.9	37.6
Local	41 WINDSOR-	N Springs Sta to Brookhaven Sta	1 way	Modified	24	24	30	8.84	45.8	48	4	419.9	35.5
Local	55ANDSP	Lindbergh Sta to Roswell Rd Sta	1 way	Modified	16	16	24	7.72	46.4	69	6	530.8	52.2
Local	55ANDSP-	Roswell Rd Sta to Lindbergh Sta	1 way	Modified	16	16	24	7.72	41.3	69	6	530.8	46.5
Local	85 HOLCOMB	N Springs Sta to N Point Sta	1 way	Modified	16	24	30	18.12	70.0	55	10	990.6	63.0
Local	85 HOLCOMB-	N Point Sta to N Springs Sta	1 way	Modified	16	24	30	18.00	88.1	55	10	990.0	79.2
Local	87C ROSW	S Springs/Perim PM to N Point Sta	1 way	Modified	16	24	30	13.57	51.9	55	7	746.4	46.8
Local	87C ROSW-	N Point Sta to S Springs/Perim PM	1 way	Modified	16	24	30	13.57	62.4	55	7	746.4	56.1
Local	91 HENDERS	Brookhaven Sta to Doraville Sta	1 way	No Change	25	30	30	12.84	66.0	42	6	544.4	45.6
Local	91 HENDERS-	Doraville Sta to Brookhaven Sta	1 way	No Change	25	30	30	12.84	69.6	42	6	544.4	48.0
Local	PC1	Perim Ctr Circ 1, Dunwoody-S Springs	1 way	Added	8	16	30	3.40	19.6	89	5	289.3	28.3
Local	PC1-	Perim Ctr Circ1, S Springs-Dunwoody	1 way	Added	8	16	30	3.26	19.3	89	5	289.3	28.3
Local	PC2	Perim Ctr Circ 2, Medical Sta	1 way	Added	8	16	30	4.72	22.2	89	6	418.9	32.5
Local	PC2-	Perim Ctr Circ 2, Medical Sta	1 way	Added	8	16	30	4.72	21.9	89	6	418.9	32.1
Local	CO 10 AR/	Big Chicken Sta to Cumberland Sta	1 way	Modified	16	24	30	6.76	30.5	55	5	371.8	27.5
Local	CO 10 MART	Cumberland Sta to Big Chicken Sta	1 way	Modified	16	24	30	6.76	35.0	55	4	371.8	31.5
Local	CO 15A WINDY	Windy Hill Sta to SR 120 Sta	1 way	Added	32	32	60	19.47	80.9	33	3	644.9	44.0
Local	CO 15AX	SR 120 Sta to Windy Hill Sta	1 way	Added	32	32	60	0.30	6.5	33	3	9.9	3.5
Local	CO 15B WINDY	Windy Hill Sta to SR 120 Sta	1 way	Added	32	32	60	19.25	84.3	33	3	637.7	45.8
Local	CO 15BX	SR 120 Sta to Windy Hill Sta	1 way	Added	32	32	60	0.32	6.6	33	3	10.6	3.6
Local	CO 197	W Roswell P&R to S Spgs Sta	1 way	Modified	20	30	30	16.94	80.3	46	7	779.2	60.2
Local	CO 197-	S Spgs Sta to W Roswell P&R	1 way	Modified	20	30	30	16.94	82.3	46	7	779.2	46.7
Local	CO 20 SOUT	Cumberland Sta to Windy Hill Sta	1 way	Modified	30	40	60	17.32	76.5	31	5	528.3	38.2
Local	CO 20 SOUT-	Windy Hill Sta to Cumberland Sta	1 way	Modified	30	40	60	17.32	68.7	31	5	528.3	34.4
Local	CO 202	W Cobb to E Cobb	1 way	Modified	20	30	30	22.13	125.6	46	11	1,018.0	94.2
Local	CO 202-	E Cobb to W Cobb	1 way	Modified	20	30	30	22.13	79.6	46	11	1,018.0	59.7
Local	CO 203	N Marietta to Powers Ferry Sta	1 way	No Change	20	30	30	11.75	62.0	46	6	540.5	46.5
Local	CO 203-	Powers Ferry Sta to N Marietta	1 way	No Change	20	30	30	11.95	48.3	46	6	549.7	36.2
Local	CO 207A	W Cobb to N Point Sta	1 way	Modified	16	30	30	27.95	138.7	51	16	1,411.5	114.4
Local	CO 207A-	N Point Sta to W Cobb	1 way	Modified	16	30	30	27.95	107.1	51	16	1,411.5	88.3
Local	CO 207B	Big Chicken Sta to N Point Sta	1 way	Modified	16	30	0	16.91	69.4	41	9	684.9	46.9
Local	CO 207B-	N Point Sta to Big Chicken Sta	1 way	Modified	16	30	0	16.91	74.9	41	9	684.9	50.6

Table 5.3-2

Alternative 3 – Average Weekday Bus Operating Plan (cont.)

TABLE 5.3-2 (CONTINUED)
ALTERNATIVE 3—AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Offpeak	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Local	CO 208	County Farm to Dunwoody Sta	1 way	Modified	32	32	60	19.42	102.9	33		643.3	56.0
Local	CO 208-	Dunwoody Sta to County Farm	1 way	Modified	32	32	60	19.42	82.5	33	6	643.3	44.9
Local	CO 209	Cumberland Sta to Six Flags Sta	1 way	Modified	12	24	30	11.79	56.2	63		736.9	57.6
Local	CO 209-	Six Flags Sta to Cumberland Sta	1 way	Modified	12	24	30	11.79	62.3	63	10	736.9	63.9
Local	CO 20A HIGHL-	Cumberland Sta to Highlands Pkwy	1 way	Modified	60	60	0	13.60	61.0	15		204.0	15.3
Local	CO 20A HIGHL-	Highlands Pkwy to Cumberland Sta	1 way	Modified	60	60	0	13.60	70.7	15	3	204.0	17.7
Local	CO 210	Downtown Kennesaw to Homes Sta	1 way	Modified	15	30	60	30.76	134.0	47		1,445.7	103.8
Local	CO 210-	Homes Sta to Downtown Kennesaw	1 way	Modified	15	30	60	30.76	110.0	47	17	1,445.7	85.3
Local	CO 211	Acworth P&R to W Roswell P&R	1 way	Modified	30	30	0	27.22	119.5	30		816.6	59.8
Local	CO 211-	W Roswell P&R to Acworth P&R	1 way	Modified	30	30	0	27.22	109.2	30	8	816.6	54.6
Local	CO 212	Stilesboro Rd to Shallowford Rd	1 way	Modified	30	30	60	20.16	106.2	35		705.6	61.0
Local	CO 212-	Shallowford Rd to Stilesboro Rd	1 way	Modified	30	30	60	20.16	75.2	35	6	705.6	43.2
Local	CO 213	Powder Spgs to Cumberland Sta	1 way	Modified	30	30	60	10.96	74.7	35		383.6	43.0
Local	CO 213-	Cumberland Sta to Powder Spgs	1 way	Modified	30	30	60	10.96	43.4	35	4	383.6	25.0
Local	CO 214	Powder Spgs to E Cobb	1 way	Modified	30	30	60	26.16	122.3	35		915.6	70.3
Local	CO 214-	E Cobb to Powder Spgs	1 way	Modified	30	30	60	26.16	111.5	35	8	915.6	64.1
Local	CO 215	Villa Rica Rd to Trickum Rd	1 way	No Change	30	30	0	20.81	103.8	30		624.3	51.9
Local	CO 215-	Trickum Rd to Villa Rica Rd	1 way	No Change	30	30	0	20.81	79.8	30	6	624.3	39.9
Local	CO 217	Six Flags Sta to Wade Green Rd	1 way	No Change	15	30	60	27.43	116.8	47		1,289.2	90.5
Local	CO 217-	Wade Green Rd to Six Flags Sta	1 way	No Change	15	30	60	27.43	129.3	47	17	1,289.2	100.2
Local	CO 218	Elizabeth Sta to Austell	1 way	No Change	20	30	0	14.79	66.4	36		532.4	39.8
Local	CO 218-	Austell to Elizabeth Sta	1 way	No Change	20	30	0	14.79	74.6	36	7	532.4	44.8
Local	CO 45 BARR-	South Loop Sta to Town Ctr Sta	1 way	Modified	16	16	30	8.90	42.1	66		589.6	45.8
Local	CO 45 BARR-	Town Ctr Sta to South Loop Sta	1 way	Modified	16	16	30	8.90	51.9	66	6	589.6	56.4
Local	CO 60 JOHN-	Big Chicken Sta to S Spgs Sta	1 way	Modified	32	32	60	13.81	66.1	33		457.5	35.9
Local	CO 60 JOHN-	S Spgs Sta to Big Chicken Sta	1 way	Modified	32	32	60	13.81	59.3	33	4	457.5	32.3
Local	GW10 DV E	Gwinnett Pl to Doraville Sta	1 way	Modified	15	30	30	12.42	55.3	52		645.8	47.0
Local	GW10 DV E-	Doraville Sta to Gwinnett Pl	1 way	Modified	15	30	30	12.42	68.1	52	9	645.8	57.9
Local	GW10 DV W	Gwinnett Pl to Doraville Sta	1 way	Modified	15	30	30	13.31	76.2	52		692.1	64.8
Local	GW10 DV W-	Doraville Sta to Gwinnett Pl	1 way	Modified	15	30	30	13.31	58.1	52	9	692.1	49.4
Local	GW15	Gwinnett Pl to Mall of GA	1 way	Added	30	30	60	18.79	79.3	35		657.7	45.6
Local	GW15-	Mall of GA to Gwinnett Pl	1 way	Added	30	30	60	18.79	80.6	35	6	657.7	46.4
Local	GW20 GWPL	Gwinnett Pl to Jimmy Carter Blvd	1 way	Modified	30	30	60	21.67	112.6	35		738.5	64.7
Local	GW20 GWPL-	Jimmy Carter Blvd to Gwinnett Pl	1 way	Modified	30	30	60	21.67	98.4	35	7	738.5	56.6
Local	GW25	Norcross to Centerville	1 way	Added	30	60	60	18.28	75.4	26		475.3	32.0
Local	GW25-	Centerville to Norcross	1 way	Added	30	60	60	18.28	106.6	26	6	475.3	45.3
Local	GW30 TECH	Gwinnett Pl to Technology Park	2 way	Modified	30	30	60	21.47	115.2	70	4	1,502.9	132.5
Local	GW35	L'ville-Suwanee P&R to S SR 20 P&R	1 way	Added	30	60	60	17.53	52.9	26		455.8	22.5
Local	GW35-	S SR 20 P&R to L'ville-Suwanee P&R	1 way	Added	30	60	60	17.53	62.8	26	4	455.8	26.7
Local	GW40 GWIN-	Gwinnett Pl to Lawrenceville	1 way	Modified	30	30	60	18.18	71.2	35		636.3	41.0
Local	GW40 GWIN-	Lawrenceville to Gwinnett Pl	1 way	Modified	30	30	60	18.18	80.7	35	5	636.3	46.4
Local	GW45	Tucker CR to Dacula CR	1 way	Added	30	60	0	24.95	97.3	21		524.0	34.1
Local	GW45-	Dacula CR to Tucker CR	1 way	Added	30	60	0	24.95	105.9	21	7	524.0	37.1
Local	GW50 BUF	Gwinnett Pl to Mall of Georgia	1 way	Modified	30	30	60	23.28	85.9	35		814.8	49.4
Local	GW50 BUF-	Mall of Georgia to Gwinnett Pl	1 way	Modified	30	30	60	23.28	88.1	35	5	814.8	50.7
Local	GW55	L'ville-Suwanee P&R to Lawrenceville	1 way	Added	30	60	60	10.84	38.5	26		281.8	16.4
Local	GW55-	Lawrenceville to L'ville-Suwanee P&R	1 way	Added	30	60	60	10.84	43.0	26	2	281.8	18.3

Table 5.3-2

**Alternative 3 – Average Weekday Bus
Operating Plan (cont.)**
**TABLE 5.3-2 (CONTINUED)
ALTERNATIVE 3--AVERAGE WEEKDAY BUS OPERATING PLAN**

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Offpeak	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Local	GW60 CENTER-	Duluth to Lilburn CR	1 way	Modified	60	60	60	28.58	122.1	20	7	571.6	39.7
Local	GW60 CENTER-	Lilburn CR to Duluth	1 way	Modified	60	60	60	28.58	146.6	20	7	571.6	47.6
Local	GW 65	Tucker CR to Peachtree Corners	1 way	Added	30	60	0	13.74	62.8	21	21	288.5	22.0
Local	GW 65-	Peachtree Corners to Tucker CR	1 way	Added	30	60	0	13.74	60.3	21	4	288.5	21.1
Local	GW70 LAW	Park Place to Mall of Georgia	1 way	Modified	30	60	60	24.60	89.7	26	6	639.6	38.1
Local	GW70 LAW-	Mall of Georgia to Park Place	1 way	Modified	30	60	60	24.60	82.9	26	6	639.6	35.2
Local	GW 75	Dacula CR to Mall of GA	1 way	Added	30	60	0	14.51	48.7	21	4	304.7	17.0
Local	GW 75-	Mall of GA to Dacula CR	1 way	Added	30	60	0	14.51	49.0	21	4	304.7	17.1
Local	GW 80DAC	Gwinnett Pl to Dacula CR Sta	2 way	Modified	30	30	0	21.91	70.5	60	3	1,314.6	70.5
Local	GW 90SN	Gwinnett Pl to Snellville	1 way	No Change	30	30	0	14.02	61.5	30	3	420.6	30.8
Local	GW 90SN-	Snellville to Gwinnett Pl	1 way	No Change	30	30	0	14.02	51.7	30	9	420.6	25.8
Local	TC1	Town Ctr Circulator, North/East	1 way	Added	8	16	30	6.44	32.6	89	5	571.6	47.7
Local	TC1X	Town Ctr Circulator, North/East	1 way	Added	8	16	30	0.37	6.9	89	5	32.8	10.0
Local	TC2	Town Ctr Circulator, West	1 way	Added	8	16	30	6.97	36.9	89	5	618.6	54.0
Local	TC2X	Town Ctr Circulator, West	1 way	Added	8	16	30	0.56	7.8	89	5	49.7	11.4
Local	125CANTON-	Town Ctr Circulator, West	1 way	Added	30	60	60	26.95	102.1	26	7	700.7	43.4
Local	125CANTON-	Holcomb Br Sta to Canton	1 way	No Change	30	60	60	26.95	84.4	26	7	700.7	35.9
Local	CANCIRC1	Canton Circulator 1	1 way	Added	30	30	30	4.92	15.7	40	1	196.8	10.2
Local	CANCIRC1-	Canton Circulator 1	1 way	Added	30	30	30	4.92	15.9	40	1	196.8	10.3
Local	CANCIRC2	Canton Circulator 2	1 way	Added	30	30	30	9.25	24.9	40	3	370.0	16.2
Local	CANCIRC2-	Canton Circulator 2	1 way	Added	30	30	30	9.25	24.0	40	3	370.0	15.6
Local	140 N ALPH	N Fulton to N Point Sta	1 way	Added	16	24	60	11.08	43.6	50	5	554.0	36.0
Local	140 N ALPH-	N Point Sta to N Fulton	1 way	Added	16	24	60	11.08	47.9	50	5	554.0	39.5
Local	CUMMCIRC	Cumming Circulator	1 way	Added	30	30	60	8.33	24.3	35	2	291.6	14.5
Local	ALP/MANS	Windward Sta to Holcomb Br Sta	1 way	Added	30	30	60	8.33	25.2	35	2	291.6	14.5
Local	ALP/MANS-	Holcomb Br Sta to Windward Sta	1 way	Added	24	30	60	10.76	51.3	38	8	408.9	32.1
Local	LCIGWNT	LCI Gwinnett Circulator	1 way	Added	24	30	60	10.76	46.5	38	8	408.9	29.1
Local	LCIGWNT-	LCI Gwinnett Circulator	1 way	Added	8	16	30	11.73	48.2	89	12	1,041.0	70.4
Local	NPCCIRC	Northpoint Circulator	1 way	Added	8	16	30	11.73	48.5	89	12	1,041.0	71.0
Local	NPCCIRC-	Northpoint Circulator	1 way	Added	8	16	30	7.06	31.2	89	5	626.6	45.6
Local	SB-PH	N Point Sta to Gwinnett Pl	1 way	Added	8	16	30	7.06	31.8	89	5	626.6	46.5
Local	SB-PH-	Gwinnett Pl to N Point Sta	1 way	Added	30	30	60	15.05	67.8	35	5	526.8	39.0
Local	WIND	Windward Sta to N Point Sta	1 way	Added	30	30	60	15.05	65.2	35	5	526.8	37.5
Local	WIND-	N Point Sta to Windward Sta	1 way	Added	24	24	30	11.88	55.2	48	6	564.3	42.8
Local	WIND-	N Point Sta to Windward Sta	1 way	Added	24	24	30	11.88	51.3	48	6	564.3	39.7

Table 5.3-2

Alternative 3 – Average Weekday Bus Operating Plan (cont.)

TABLE 5.3-2 (CONTINUED)
ALTERNATIVE 3—AVERAGE WEEKDAY BUS OPERATING PLAN

Type	Line ID	Route Pattern	Coding	Change from Baseline	Headway			Distance & Run Times		Daily Operating Statistics			
					Peak	Offpeak	Late Eve.	Distance (mi)	Total Run Time (min)	Vehicle Trips	Peak Vehicles	Rev-Miles	Rev-Hours
Express	CO 70 I-CUMB	Holmes Sta to Dunwoody Sta	1 way	Modified	60	60	0	24.33	62.6	15	15	365.0	15.7
Express	CO 70 O-CUMB	Dunwoody Sta to Holmes Sta	1 way	Modified	60	60	0	24.15	73.3	15	3	362.3	18.3
Express	GR 400	Cumming to N Point Sta	1 way	Modified	30	60	0	18.50	34.0	21	21	388.5	11.9
Express	GR 400A	N Point Sta to Cumming	1 way	Modified	30	60	0	19.68	35.2	21	3	413.3	12.3
Express	GR 407	McFarland P&R to Cumberland Sta	1 way	Modified	30	0	0	28.78	51.2	12	3	345.4	10.2
Express	GR 408	Johns Creek to Doraville Sta	1 way	Modified	30	60	0	16.34	80.2	21	21	343.1	28.1
Express	GR 408A	Doraville Sta to Johns Creek	1 way	Modified	30	60	0	16.32	53.0	21	5	342.7	18.6
Express	GR 409	Holcomb Br Sta to Doraville Sta	1 way	Modified	30	60	0	15.76	84.1	21	21	331.0	29.4
Express	GR 409B	Doraville Sta to Holcomb Br Sta	1 way	Modified	30	60	0	15.76	70.8	21	6	331.0	24.8
Express	GR 410	Discover Mills to Lindbergh Sta	1 way	No Change	30	0	0	23.90	39.3	12	12	286.8	7.9
Express	GR 410A	Lindbergh Sta to Discover Mills	1 way	No Change	30	0	0	23.85	35.9	12	3	286.2	7.2
Express	GR 412	Discover Mills to Midtown	1 way	Modified	30	60	0	29.76	67.9	21	21	625.0	23.8
Express	GR 412-	Midtown to Discover Mills	1 way	Modified	30	60	0	29.76	61.5	21	5	625.0	21.5
Express	GR 467	Douglas County to Cumberland Sta	1 way	Modified	30	0	0	29.20	73.4	12	4	350.4	14.7
Express	GR 477	Dallas/ Powder Sprigs to Cumberland Sta	1 way	Modified	30	0	0	28.48	154.3	12	8	341.8	30.9
Express	GR 481	Acworth to Town Ctr Sta	1 way	Modified	30	60	0	8.40	26.8	21	21	176.4	9.4
Express	GR 481-	Town Ctr Sta to Acworth	1 way	Modified	30	60	0	8.40	27.4	21	2	176.4	9.6
Express	GR 485A	Cumberland Sta to Flat Shoals P&R	1 way	Modified	30	60	0	22.87	44.6	21	21	480.3	15.6
Express	GR 485B	Flat Shoals P&R to Cumberland Sta	1 way	Modified	30	60	0	22.66	57.3	21	4	475.9	20.1
Express	GR 490	Canton P&R to Town Center Sta	1 way	Modified	30	0	0	19.69	38.3	12	2	236.3	7.7
Express	GR 493	Towne Lake P&R to N Point Sta	1 way	Modified	30	60	0	6.74	31.5	21	2	141.5	11.0
Express	GR 493A	N Point Sta to Towne Lake P&R	1 way	Modified	30	60	0	6.74	28.0	21	2	141.5	9.8
Express	GW101A	I-985/SR 20 P&R to Atlanta CBD	1 way	Modified	30	60	0	43.83	118.6	21	7	920.4	41.5
Express	GW101B	Atlanta CBD to Mall of Georgia	1 way	Modified	30	60	0	40.30	75.0	21	7	846.3	26.3
Express	GW102A	I-85 Indian Trail P&R to Atlanta CBD	1 way	Modified	30	0	0	36.95	120.8	12	6	443.4	24.2
Express	GW102B	Atlanta CBD to Gwinnett Pl	1 way	Modified	30	0	0	23.01	48.5	12	6	276.1	9.7
Express	GW103A	Discover Mills to Atlanta CBD	1 way	Modified	30	0	0	39.10	112.1	12	12	469.2	22.4
Express	GW103B	Atlanta CBD to Discover Mills	1 way	Modified	30	0	0	31.52	60.8	12	6	378.2	12.2
Express	GW105	Collins Hill P&R to Atlanta CBD	1 way	Added	30	0	0	35.66	65.3	12	6	427.9	13.1
Express	GW105A	Atlanta CBD to West SR 316 North	1 way	Added	30	0	0	34.47	94.4	12	6	413.6	18.9
Express	GW106	I-985/SR 20 P&R to Doraville Sta	1 way	Added	30	0	0	25.24	45.9	12	12	302.9	9.2
Express	GW106A	Doraville Sta to Jimmy Carter Blvd South	1 way	Added	30	0	0	31.93	72.2	12	4	383.2	14.4
Express	GW107	Indian Trail P&R to Dunwoody Sta	1 way	Added	30	0	0	12.37	25.6	12	4	148.4	5.1
Express	GW107A	Dunwoody Sta to Gwinnett Place	1 way	Added	30	0	0	28.55	76.0	12	4	342.6	15.2
Express	GW108	Indian Trail P&R to Lindbergh Sta	1 way	Added	30	0	0	15.39	28.4	12	4	184.7	5.7
Express	GW108A	Lindbergh Sta to Gwinnett Pl	1 way	Added	30	0	0	31.12	77.1	12	4	373.4	15.4
Express	GW109	Collins Hill P&R to Lindbergh Sta	1 way	Added	30	0	0	28.04	43.8	12	8	336.5	8.8
Express	GW109A	Lindbergh sta to West SR 316 South	1 way	Added	30	0	0	29.37	53.4	12	4	352.4	10.7
Express	GW110	Drowning Ck P&R to Discover Mills P&R	1 way	Added	30	0	0	16.82	30.9	12	3	201.8	6.2
Express	GW110A	Discover Mills P&R to East SR 316 North	1 way	Added	30	0	0	19.94	45.9	12	3	239.3	9.2
Express	GW111	Drowning Ck to Dunwoody Sta	1 way	Added	30	0	0	37.16	67.8	12	4	447.6	10.9
Express	GW111A	Dunwoody sta to East SR 316 South	1 way	Added	30	0	0	37.16	67.8	12	4	445.9	13.6
Express	GW112	Hamilton Mill P&R to Discover Mills P&R	1 way	Added	30	0	0	13.72	26.0	12	2	164.6	5.2
Express	GW112A	Discover Mills P&R to Mall of Georgia	1 way	Added	30	0	0	14.44	29.5	12	2	173.3	5.9
Express	GW113	I-85/SR 20 P&R to Dunwoody Sta	1 way	Added	30	0	0	28.44	46.6	12	3	341.3	9.3
Express	GW113A	Dunwoody Sta to Mall of Georgia	1 way	Added	30	0	0	28.75	46.0	12	3	345.0	9.2
TOTALS										6,455	509	91,514	6,234

6.0 COST METHODOLOGIES AND RESULTS

Transit costs associated with both capital and operating and maintenance (O&M) were estimated for bus and fixed guideway service for the baseline alternative (2025 Regional Transportation Plan Limited Update transit services within the NSAS/GA 400 area) and each of the three final alternatives. The estimated costs are based on transit service levels derived from the year 2025 transit operating plans described in the preceding sections of this report. This section documents the cost methodologies used to develop the cost estimates, as well as the cost results.

6.1 Cost Methodologies

This section presents the process that was used to develop capital and O&M cost estimates for the NSAS/GA 400 transit baseline and final three alternatives.

6.1.1 Capital Costs

Most capital cost estimates for the NSAS/GA 400 transit alternatives were developed using methodology and unit cost guidelines developed for GRTA and documented in the report *Transit Facility Capital Cost Methodology & Unit Cost Guidelines* in October 2002. This report was prepared to provide basic guidelines that can be used to ensure consistency in the estimation of capital costs for transit facility projects in the Atlanta region.

The report presents capital cost guidelines for the initial three planning phases of a project:

- **Order-of-Magnitude Unit Costs** – These general unit cost guidelines are appropriate at the early definition stage of a transit project, such as systems planning studies
- **Conceptual Unit Costs** – These unit cost guidelines are appropriate at the feasibility analysis phase of a transit project
- **Alternatives Analysis Unit Costs** – These detailed unit cost guidelines are appropriate as the project undergoes FTA’s Alternatives Analysis process

An Environmental Impact Statement and preliminary engineering typically begins after completion of an Alternatives Analysis. At that point, materials, quantities and unit prices should be defined on a project-specific basis.

Unit costs presented in the report address four modes:

- Heavy rail transit (HRT);
- Light rail transit (LRT);
- Bus rapid transit (BRT); and
- Commuter rail.

For the purposes of the NSAS/GA 400 Study, unit costs were estimated at the conceptual level. Conceptual level cost estimates are appropriate during the feasibility analysis phase of the project. At this stage, major project elements are defined at a level that allows for cost estimates to be completed on a cost category or element basis (e.g., guideway, stations, etc.). Information needed to estimate capital costs for light and heavy rail transit and bus rapid transit on a conceptual level basis are as follows:

Light Rail, Heavy Rail - Length of project (linear feet), Number of stations and profile (elevated, at-grade, below-grade), Number of yards, Number of rail cars, Right-of-way comparable costs by land use category

Bus Rapid Transit - Type of facility (add to existing arterial, new facility, new HOV lanes, etc.), Number of stations and profile (elevated, at-grade, superstop), Number of maintenance facilities (CNG vs. non-CNG), Number of BRT buses, Right-of-way comparable costs by land use category

For the NSAS/GA 400 Study, cost estimate templates developed for GRTA were applied as guidelines to estimate conceptual-level unit costs associated with the alternatives for the North Line (HRT), the I-285 Line (BRT), and the I-85 Line (BRT), as well as buses and bus facilities (garage, park-ride lots, etc.). See Appendix A for samples of the templates for each of the modes. It is important to note that for the North Line (HRT), the rail car costs were calculated for peak vehicles only. It was assumed that MARTA rail cars are proposed to be purchased in sufficient quantities to meet requirements for spare rail cars.

For park-ride lots, unit construction costs are drawn from the Alternatives Analysis Level and are \$3,300 for each parking space and \$50,000 for each bus bay. These costs are multiplied by a 1.25 contingency factor, 1.12 special conditions factor, and 1.3 soft cost factor. Added to this are real estate costs. Assumptions on acreage required were 3 acres for 200 spaces, 4 acres for 300 spaces, and 6 acres for 500 spaces. Property was assumed to be \$3, \$6, or \$9 per square foot dependent on location and was set consistent with PBSJ right-of-way estimates for comparable property in the highway cost estimating methodology. The real estate costs are multiplied by a 1.5 contingency factor, and a 1.09 soft cost factor.

For the Northwest Line (LRT), capital costs from the 2025 RTP Limited Update (adopted October 23, 2002) were used, as these updated cost estimates reflect work being done in the *Northwest Connectivity Study*. Capital cost estimates from the 2025 RTP Limited Update and local plans were used for the Cumberland and Perimeter Fixed Guideway People Movers, respectively.

6.1.2 Operating and Maintenance Costs

The methodology for estimating fixed guideway and bus O&M costs for the NSAS/GA 400 transit baseline and final three alternatives is described below.

6.1.2.1 Fixed Guideway O&M Costs

The O&M costs for fixed guideway service are based primarily on MARTA's cost experience, with adjustments based on the experience of LRT systems around the country. No decisions have been made on what agency(s) would actually operate the proposed fixed guideways. The fixed guideway extension on GA 400 and most of the I-285 fixed guideway would be in the MARTA service area, so MARTA would be a logical choice. Even if the lines are developed by GRTA, it would be reasonable for GRTA to contract with MARTA to operate the specialized rail services. There would also be economies of scale in having MARTA operate the new lines, instead of a separate agency, which would have to duplicate many of the supervisory and support functions that MARTA already has. However, if MARTA has no role in operating the new line, the unit costs that would be incurred by a new agency would likely be similar to MARTA's. Power and material costs would be the same; labor costs might be less initially for a new agency, but over time would probably approach those of MARTA's.

Manuel Padron & Associates (MPA) developed a detailed O&M cost model for MARTA as part of a comprehensive study of financial capacity that was completed in 1999. In 2001-2002, MPA refined the model for use in ARC's I-285 Corridor Study and GRTA's Northwest Connectivity Study and this NSAS/GA 400 Study. The model uses the detailed line item budget, and allocates individual line items to service parameters, including revenue vehicle-miles and hours, peak vehicles, miles of guideway, and number of stations and maintenance facilities/storage yards. The model can then be applied by inputting future estimates of those service parameters developed from each alternatives' operating plan.

The fixed guideway model includes separate divisions for HRT and LRT. The costs for items such as LRT stations, which cost much less to operate and maintain than HRT stations, have been adjusted based on experience of other LRT systems. For example, station maintenance for LRT is assumed to cost one-third of the HRT station cost. The cost model also has been adjusted to account for inflation between 1999 and 2002. As an example, Appendix B presents the Alternative 1 results from the fixed guideway O&M cost model.

The cost model uses the following input variables to estimate O&M costs for HRT and LRT:

- Number of peak rail cars
- Annual revenue car-miles
- Annual revenue train-hours
- Number of stations
- Number of maintenance yards
- Directional route miles

The O&M costs for people movers were developed based primarily on the cost experience of automated guideway modes operated in Jacksonville and Miami, Florida. The annual O&M costs in 2002 dollars for people movers are estimated by multiplying estimated annual revenue car-hours to a unit cost of \$192 per revenue car-hour. This is a fully allocated cost and includes all administrative, transportation operations, and maintenance costs.

6.1.2.2 Bus O&M Costs

Bus service in the study area would be operated by several agencies: MARTA, Cobb Community Transit (CCT), Gwinnett County Transit (GCT), other local governments, Transportation Management Associations, and possibly GRTA for regional express routes. Specific bus routes could be operated by any of the above agencies, either directly or by contracting to a private service provider. The bus services proposed for each NSAS/GA 400 alternative and the RTP are tabulated in an operating statistic spreadsheet which estimates peak buses, annual bus-hours, and annual bus-miles of service required to operate the system. The bus O&M costs are then estimated for each alternative and the RTP NSAS/GA 400 area as a whole based on the unit cost model described below. The bus O&M cost model is developed from year 2000 MARTA and CCT bus operating costs (inflated to 2002 dollars) and 2002 GCT bus operating costs. Presented in Table 6.1-1 below, the bus O&M cost model is a three variable cost model estimating O&M costs for three cost centers (Vehicle Operations, Vehicle Maintenance, and Other).

The resulting NSAS/GA 400 cost factors in 2002 dollars are:

Vehicle Operations Cost/Revenue Bus-Hour	\$ 40.83
Vehicle Maintenance Cost/Rev. Bus-Mile	\$ 0.75
Other Cost/Peak Bus	\$ 43,118.48

For bus rapid transit (BRT) projects, additional costs are estimated for station maintenance and system security. The unit costs for these items are based on experience of other systems.

Table 6.1-1 | Bus O&M Cost Model

Cost Center	Gwinnett FY 2002	Cobb FY 2000*	MARTA FY 2000*
Veh. Operations	\$990,038	\$4,056,360	\$92,126,685
Veh. Maintenance	\$348,636	\$1,114,155	\$48,372,240
<u>Other</u>	<u>\$614,738</u>	<u>\$1,786,455</u>	<u>\$39,146,395</u>
Total	\$1,953,412	\$6,956,970	\$179,645,320
Revenue-Hours	20,173	111,100	2,191,600
Revenue-Miles	568,879	1,728,800	27,246,300
Peak Buses	17	42	580
Total Cost/Rev. Hour	\$96.83	\$62.62	\$81.97
Total Cost/Rev. Mile	\$3.43	\$4.02	\$6.59
V.O. Cost/Rev. Hour	\$49.08	\$36.51	\$42.04
V.M. Cost/Rev. Mile	\$0.61	\$0.64	\$1.78
Other Cost/Peak Bus	\$36,161	\$42,535	\$67,494
Weight Factor	0.3	0.6	0.1
NSAS Cost Factors			
-- V.O. Cost/Rev. Hour	\$40.83		
-- V.M. Cost/Rev. Mile	\$0.75		
-- Other Cost/Peak Bus	\$43,118.48		

* = Cobb & MARTA 2000 costs inflated to 2002 dollars by 5%.

6.2 Cost Results

This section presents the capital and O&M cost estimate results for the NSAS/GA 400 transit baseline and final three alternatives. Table 6.2-1 below presents a summary of both capital and O&M costs for each alternative. Capital and O&M cost estimate breakdowns for each alternative are presented in Appendix C.

Table 6.2-1

Summary of Transit Capital and O&M
Cost Estimates

Alternative	Capital Cost	Annual O&M Cost
Baseline (RTP in Northern Sub-Area)	\$3,433,661,000	\$169,345,000
Alternative 1	\$4,454,770,000	\$237,121,000
Alternative 2	\$4,561,158,000	\$242,868,000
Alternative 3	\$4,098,137,000	\$199,175,000

For the Baseline Alternative, which consists of costs in the 2025 RTP Limited Update attributable to the Northern Sub-Area, capital costs are estimated to be approximately \$3.43 billion. Annual O&M costs are estimated to be approximately \$169.34 million. Fixed guideway facilities in the Baseline Alternative include the North Line extension (with three new stations), the Northwest Line, and the Cumberland People Mover. The Baseline Alternative also includes eleven park-ride/bus transfer facilities supporting express and local bus operations.

Compared to the Baseline Alternative, Alternatives 1 and 2 also include the I-285 Line from Cumberland to Doraville and the Northeast Line from Doraville to Discover Mills, as well as two additional stations on the North Line (for a total of five new stations). Like the Baseline Alternative, these alternatives also include eleven park-ride/bus transfer facilities, although some are at different locations reflecting changes to the express and local bus network. The result is that capital costs for Alternative 1 are estimated to be \$1.02 billion higher than the Baseline Alternative. O&M costs for Alternative 1 are estimated to be \$67.78 million higher, with the increase split fairly evenly between fixed guideway (LRT and BRT) costs, which are higher by \$30.30 million, and express and local bus costs (\$37.47 million higher).

While Alternative 2 includes the same transit facilities and services as Alternative 1, the transit supportive land uses assumed in Alternative 2 result in higher transit ridership. Consequently, capital and O&M costs for Alternative 2 are \$0.11 billion and \$5.75 million higher than Alternative 1, respectively. The additional costs for Alternative 2 are primarily due to the need to purchase and operate additional LRT and BRT vehicles to accommodate demand. Conversely, capital and O&M costs for local and express bus service are slightly lower in Alternative 2 than Alternative 1, due to slightly higher average operating speeds. O&M costs, for example, increased by \$5.99 million for fixed guideway, but decreased by \$0.25 million for express and local bus operations.

The cost differences from the Baseline Alternative for Alternative 3 are largely attributable to the addition of the I-285 Line from Cumberland to Doraville and the Perimeter People Mover. Other fixed guideway facilities remain the same as

the Baseline Alternative (i.e., the North Line extension with three new stations, the Northwest Line, and the Cumberland People Mover). Alternative 3 also includes a total of 15 park-ride/bus transfer facilities to support an expanded express and local bus network. The result is that capital costs for Alternative 3 are estimated to be \$.66 billion higher than the Baseline Alternative. O&M costs for Alternative 3 are estimated to be \$29.83 million higher than the Baseline Alternative, with the increase split fairly evenly between fixed guideway (LRT and BRT) costs, which are higher by \$15.15 million, and express and local bus costs (\$14.68 million higher).

APPENDIX A

Transit Capital Cost Templates

HEAVY RAIL TRANSIT UNIT CAPITAL COSTS CONCEPTUAL-LEVEL

Element/Item	Unit	Unit Cost	Units	Project Cost	Source/Comment
1. Guideway					
Conceptual Cost	Lin. Ft.	\$2,240		\$0	Assumes 60% at-grade, 20% elevated, 20% retained fill.
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Guideway Costs				\$0	
2. Stations					
Conceptual Cost - At-Grade	Station	\$23,275,000		\$0	Assumes station, 750 surface pking, 6 bus bays
Conceptual Cost - Elevated	Station	\$41,310,000		\$0	Assumes station, 750 struct. parking, 6 bays, 1 ped bridge
Conceptual Cost - Underground	Station	\$73,350,000		\$0	Assumes station, 750 struct. parking, 6 bays
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Station Costs				\$0	
3. Yard & Shop					
Conceptual Cost	Yard	\$140,000,000		\$0	AA-level unit cost.
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Yard & Shop Costs				\$0	
4. Systems					
Conceptual Cost	Lin. Ft.	\$2,100		\$0	Sum of AA-level unit costs.
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total System Costs				\$0	
5. Vehicles					
Conceptual Cost	HRV	\$2,600,000		\$0	1 HRV plus 1/20 of M of W veh allowance
Contingency	%age	10%-15%		\$0	Determined at 8/27 workshop
Total Vehicle Costs				\$0	
6. Special Conditions (incl. Conting.)					
Conceptual Cost	% 1-4*	15%	n/a	\$0	Sum of AA-level percentages.
Total Special Conditions Costs				\$0	
7. Right-of-Way					
Conceptual Cost	Comps. by Land Use Cat.				Typical costs by land use to be determined for specified corridor.
Contingency	%age	25%-50%		\$0	Determined at 8/27 workshop
Total Right-of-Way Costs				\$0	
8. Soft Costs					
Applied to Elements 1-4, 6	% 1-4,6**	21.0%	n/a	\$0	Sum of AA-level percentages.
Applied to Elements 1-7	%1-7***	9.0%	n/a	\$0	Sum of AA-level percentages.
Total Soft Costs				\$0	
TOTAL PROJECT COST				\$0	

* - indicates line item unit cost is defined as a percentage of Element Groups 1 through 4.

** - indicates line item unit cost is defined as a percentage of Element Groups 1 through 4 and 6.

*** - indicates line item unit cost is defined as a percentage of Element Groups 1-7.

**LIGHT RAIL TRANSIT UNIT CAPITAL COSTS
CONCEPTUAL-LEVEL**

Element/Item	Unit	Unit Cost	Units	Project Cost	Source/Comment
1. Guideway					
Conceptual Cost	Lin. Ft.	\$1,840		\$0	Avg. of Minn, Orlando, I-285 Guideway Elem. Costs
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Guideway Costs				\$0	
2. Stations					
Conceptual Cost - At-Grade	Station	\$1,644,000		\$0	Assumes station, 200 surface pking, 4 bus bays
Conceptual Cost - Elevated	Station	\$8,393,000		\$0	Assumes station, 400 struct. parking, 4 bays, 1 ped bridge
Conceptual Cost - Underground	Station	\$38,035,000		\$0	Assumes station, 400 struct. parking, 4 bays
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Station Costs				\$0	
3. Yard & Shop					
Conceptual Cost	Yard	\$31,740,000		\$0	AA-level unit cost.
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Yard & Shop Costs				\$0	
4. Systems					
Conceptual Cost	Lin. Ft.	\$861		\$0	Avg of Minn, Bart, Orlando, I-285 System Element Costs
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total System Costs				\$0	
5. Vehicles					
Conceptual Cost	LRV	\$3,000,000		\$0	1 LRV plus 1/20 of M of W veh allowance
Contingency	%age	10%-15%		\$0	Determined at 8/27 workshop
Total Vehicle Costs				\$0	
6. Special Conditions (incl. Conting.)					
Conceptual Cost	% 1-4*	15%	n/a	\$0	Sum of AA-level percentages.
Total Special Conditions Costs				\$0	
7. Right-of-Way					
Conceptual Cost	Comps. by Land Use Cat.				Typical costs by land use to be determined for specified corridor.
Contingency	%age	25%-50%		\$0	Determined at 8/27 workshop
Total Right-of-Way Costs				\$0	
8. Soft Costs					
Applied to Elements 1-4, 6	% 1-4,6**	21.0%	n/a	\$0	Sum of AA-level percentages.
Applied to Elements 1-7	%1-7***	9.0%	n/a	\$0	Sum of AA-level percentages.
Total Soft Costs				\$0	
TOTAL PROJECT COST				\$0	

* - indicates line item unit cost is defined as a percentage of Element Groups 1 through 4.

** - indicates line item unit cost is defined as a percentage of Element Groups 1 through 4 and 6.

*** - indicates line item unit cost is defined as a percentage of Element Groups 1-7.

BUS RAPID TRANSIT UNIT CAPITAL COSTS CONCEPTUAL-LEVEL

Element/Item	Unit	Unit Cost	Units	Project Cost	Source/Comment
1. Guideway					
Conceptual Costs					
Change exist. 2-GP lanes to bus-only	Lin. Ft.	\$411		\$0	AA-level unit cost w/ 1 queue jumper/mile.
New Busway facility - 2 lanes	Lin. Ft.	\$852		\$0	New busway unit cost + 1 bridge/mile.
Add 2 bus lanes to existing road	Lin. Ft.	\$521		\$0	AA-level unit cost.
Add 2 HOV/Bus lanes to exit Expwy	Lin. Ft.	\$1,136		\$0	Add 2 HOV lanes unit cost + 1 flyover every 2 miles.
Mixed Traffic Intersection Impr's.	Lin. Ft.	\$142		\$0	1 queue jumper every mile.
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Guideway Costs				\$0	
2. Stations					
Conceptual Cost - At-Grade Station	Station	\$953,000		\$0	Assumes station, 100 surface spaces, 2 bus bays
Conceptual Cost - Elevated Station	Station	\$7,602,000		\$0	Assumes station, 400 struct. Spaces, 4 bays, 1 bridge
Conceptual Cost - Superstop	Station	\$75,000		\$0	AA-level superstop unit cost.
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Station Costs				\$0	
3. Yard & Shop					
Conceptual Cost - Non-CNG	Yard	\$16,000,000		\$0	AA-level unit cost.
Conceptual Cost - CNG	Yard	\$19,500,000		\$0	AA-level unit cost.
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Yard & Shop Costs				\$0	
4. Systems					
Conceptual Cost	Lin. Ft.	\$83		\$0	Assumes 1 signal pre-empt, 1 new signal, 2 stations/mile.
Contingency	%age	25%-35%		\$0	Determined at 8/27 workshop
Total Systems Costs				\$0	
5. Vehicles					
Conceptual Cost	BRT Bus	\$1,200,000		\$0	AA-level unit cost.
Contingency	%age	10%-15%		\$0	Determined at 8/27 workshop
Total Vehicle Costs				\$0	
6. Special Conditions (Including Conting.)					
Conceptual Cost	%age 1-4*	12.0%	n/a	\$0	Sum of AA-level percentages.
Total Special Conditions Costs				\$0	
7. Right-of-Way					
Conceptual Cost	Comps. by Land Use Cat.				Typical costs by land use to be determined for specified corridor.
Contingency	%age	25%-50%		\$0	Determined at 8/27 workshop
Total Right-of-Way Costs				\$0	
8. Soft Costs					
Applied to Elements 1-4, 6	% 1-4,6**	21.0%	n/a	\$0	Sum of AA-level percentages.
Applied to Elements 1-7	%1-7***	9.0%	n/a	\$0	Sum of AA-level percentages.
Total Soft Costs				\$0	
TOTAL PROJECT COST				\$0	

* - indicates line item unit cost is defined as a percentage of Element Groups 1 through 4.

** - indicates line item unit cost is defined as a percentage of Element Groups 1 through 4 and 6.

*** - indicates line item unit cost is defined as a percentage of Element Groups 1-7.

APPENDIX B

Example Fixed Guideway O&M Cost Model Results for Alternative 1

MARTA O&M COST MODEL

System Characteristics & Cost Summary

NSAS Alt. 1
HRT & LRT

System Characteristic	Driving Variable	Input Value	Cost	Headcount
Input Statistics				
Forecast Year	YEAR	2002		
Bus				
Peak Diesel Buses	PKDIESEL	0		
Peak CNG Buses	PKCNG	657		
Ann Rev Diesel Vehicle-Miles	DIESELVMI	0.00 million		
Ann Rev CNG Vehicle-Miles	CNGVMI	30.21 million		
Ann Rev Bus-Hours	BUSHOUR	2,422 thousand		
Bus Maint/Storage Facilities	BUSGARAG	4		
Heavy Rail				
Heavy Rail Route-Miles	HRRTMI	134.0		
Heavy Rail Stations	HRSTA	43		
Peak AC Railcars	PKACCAR	0.0		
Peak DC Railcars	PKDCCAR	286.0		
Ann Rev AC Vehicle-Miles	ACVMI	0.00 million		
Ann Rev DC Vehicle-Miles	DCVMI	42.95 million		
Annual Rev HR Train-Hours	HRTRAINHR	258.5 thousand		
HR Maint/Storage Yards	HRYARD	3		
Light Rail				
Light Rail Route-Miles	LRRTMI	68.4		
Light Rail Stations	LRSTA	25		
Peak Light Rail Vehicles	PKLRV	67		
Ann Rev LR Vehicle-Miles	LRVMI	9.06 million		
Ann Rev LR Train-Hours	LRTRAINHR	113.8 thousand		
LR Maint/Storage Yards	LRYARD	2		
Paratransit				
Demand Response Fleet	DRFLEET	79		
Ann Rev DR Vehicle-Miles	DRVMI	3.07 million		
Ann Rev DR Vehicle-Hours	DRVHR	170.3 thousand		
DR Maint/Storage Facilities	DRGARAGE	1		
System Total			\$454,877,769	6,620
Growth & Inflation (annual average)				
Labor: Wages & Fringe Benefit	WAGE%	2.9%		
Non-Labor:				
Services	SERV%	2.9%		
Materials	MATL%	2.9%		
Insurance	INS%	2.9%		
Utilities	UTIL%	2.9%		
Fuel	FUEL%	2.9%		
Miscellaneous	MISC%	2.9%		
Other	OTHER%	2.9%		

NOTES:

[1] Costs in 1999 dollars unless inflated per factors listed above.

MARTA O&M COST MODEL

Line Item Detail

NSAS Alt. 1
HRT & LRT

Cost Item				ESTIMATED				DEPARTMENT/COST CENTER						Total	
Div	Dept	Office	Pos.	Cost	Baseline	Unit	Cost Driver	Head-Count	Cost	Total	Cap/Ops	Distrib.	FullPart Time Distrib.	Total	
			Status	Type	Code					Headcount	Ops	Cap.	Rep.	Cost	
GMCEO BOARD OF DIRECTORS															
General Manager/Board															
01	11	11100	NR	LABOR			\$320,028 FIX	4	\$348,928	4	4	0	0	\$703,001	
				FRINGE			\$67,751 Office wages		\$73,869						
				SERV			\$10,000 Office empl.		\$10,903						
				MATL			\$4,000 Office empl.		\$4,361						
				UTIL			\$3,000 Office empl.		\$3,271						
				OTHER			\$240,000 Office empl.		\$251,671						
01	11	11500	NR	LABOR			\$375,103 FIX	7	\$408,974	13	13	0	0	\$904,382	
				FRINGE			\$46,767 Peak bus, rail vehicles		\$158,512						
				SERV			\$36,229 Peak bus, rail vehicles		\$118,501						
				MATL			\$1,806 Office NR wages		\$2,278						
				UTIL			\$137,340 Office wages		\$173,091						
				OTHER			\$44,140 Office empl.		\$56,876						
				SERV			\$8,000 Office empl.		\$10,308						
				MATL			\$2,050 Office empl.		\$2,641						
				OTHER			\$25,000 Office empl.		\$32,213						
01	12	12100	NR	LABOR			\$465,368 FIX	8	\$507,390	21	21	0	0	\$1,086,526	
				FRINGE			\$52,079 Peak bus, rail vehicles		\$738,161						
				SERV			\$212,083 Office wages		\$282,803						
				MATL			\$91,900 Office empl.		\$123,774						
				UTIL			\$5,000 Office empl.		\$6,734						
				OTHER			\$550 Office empl.		\$741						
							\$28,900 Office empl.		\$38,924						
CUSTOMER DEVELOPMENT															
EVP Customer Development															
02	25	25110	NR	LABOR			\$224,441 FIX	4	\$244,708	4	4	0	0	\$373,385	
				FRINGE			\$47,271 Office wages		\$51,539						
				SERV			\$22,500 Office empl.		\$24,532						
				MATL			\$3,250 Office empl.		\$3,543						
				OTHER			\$45,000 Office empl.		\$48,063						
02	25	25200	NR	LABOR			\$368,948 FIX	7	\$402,263	9	9	0	0	\$791,403	
				FRINGE			\$9,789 FIX		\$21,346						
				SERV			\$82,043 Office wages		\$89,452						
				MATL			\$158,840 Office empl.		\$173,183						
				UTIL			\$26,450 Office empl.		\$28,838						
				OTHER			\$70,000 Office empl.		\$76,321						
02	26	26100	NR	LABOR			\$200,080 FIX	4	\$218,158	15	15	0	0	\$780,356	
				FRINGE			\$55,355 Bus, train hours		\$69,832						
				SERV			\$25,562 Bus, train hours		\$111,508						
				MATL			\$107,102 Office wages		\$141,562						
				UTIL			\$3,100 Office empl.		\$4,225						
				OTHER			\$15,000 Office empl.		\$20,443						
02	26	26200	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$141,080						
				MATL			\$39,518 Bus, train hours		\$129,259						
				UTIL			\$30,816 Bus, train hours		\$100,796						
CUSTOMER RELATIONS															
02	26	26300	NR	LABOR			\$502,331 FIX	14	\$547,880	97	97	0	0	\$3,639,228	
				FRINGE			\$19,811 Bus, train hours		\$410,398						
				SERV			\$43,132 Bus, train hours		\$14						

MARTA Q&M COST MODEL

Line Item Detail

NSAS Alt. 1

HRT & LRT

Cost Item				ESTIMATED				DEPARTMENT/COST CENTER							Total Cost		
								Total Headcount	Cap/Ops	Distri.	Non-Rep	Full/Part Time Distri.	PTI/Contr.				
Div	Dept	Office	Type	Cost	Pos. Code	Baseline Unit Cost	Cost Driver	Head-Count	Cost	Total Headcount	Cap/Ops	Distri.	Non-Rep	Full/Part Time Distri.	PTI/Contr.	Total Cost	
TransCard Agent Customer Info Representative Customer Information Operator Customer Information Operator Other PTC/Contract Staff Overtime (hourly empl) Fringe Benefits Contractual Services Materials and Supplies Other Non-Operating Expenses	02	26	26200	LABOR	NR	108	\$26,696 Bus, train hours	4	\$116,426								
	02	26	26200	LABOR	R	500	\$25,146 Bus, train hours	3	\$82,250								
	02	26	26200	LABOR	R	501	\$23,757 Bus, train hours	24	\$621,653								
	02	26	26200	LABOR	PTIC	901	\$10,920 Bus, train hours	11	\$130,967								
	02	26	26200	LABOR	PTIC		\$13,451 Bus, train hours	13	\$190,648								
	02	26	26200	LABOR	R		\$32,484 Office R wages		\$43,853								
	02	26	26200	FRINGE			\$433,043 Office wages		\$598,750								
	02	26	26200	SERV			\$272,318 Bus, train hours		\$96,713								
	02	26	26200	MATL			\$74,300 Office empl.		\$104,772								
	02	26	26200	OTHER			\$17,000 Office empl.		\$23,972								
	02	26	26300	LABOR	NR		\$110,783 FIX			134		134		0	67	0	\$3,972,748
	02	26	26300	LABOR	NR	105	\$34,513 # Station Managers										
	02	26	26300	LABOR	NR	109	\$28,761 HR stations + 0 LR										
Station Manager Station Manager Fringe Benefits Materials and Supplies Other Non-Operating Expenses	02	26	26300	LABOR	NR		\$110,783 FIX	2	\$120,786								
	02	26	26300	LABOR	NR	105	\$34,513 # Station Managers	5	\$186,147								
	02	26	26300	LABOR	NR	109	\$28,761 HR stations + 0 LR	60	\$1,881,483								
	02	26	26300	LABOR	PTIC	902	\$11,503 HR stations + 0 LR	67	\$840,294								
	02	26	26300	FRINGE			\$591,824 Office wages		\$730,453								
	02	26	26300	MATL			\$147,200 Office empl.		\$192,017								
	02	26	26300	OTHER			\$15,000 Office empl.		\$19,567								
	02	27	27100	LABOR	NR		\$634,965 FIX	12	\$692,301								
	02	27	27100	LABOR	NR	112	\$30,138 Peak bus, rail vehicles	7	\$230,016								
	02	27	27100	LABOR	R	556	\$27,410 Peak bus, rail vehicles	13	\$398,506								
	02	27	27100	LABOR	R	502	\$25,146 Peak bus, rail vehicles	1	\$27,417								
	02	27	27100	LABOR	NR		\$112,291 Office NR wages		\$131,624								
	02	27	27100	FRINGE			\$261,416 Office wages		\$328,522								
Contractual Services Materials and Supplies Other Non-Operating Expenses	02	27	27100	SERV			\$319,999 Peak bus, rail vehicles		\$506,975								
	02	27	27100	MATL			\$25,000 Office empl.		\$33,315								
	02	27	27100	OTHER			\$25,000 Peak bus, rail vehicles		\$39,606								
	02	27	27200	LABOR	NR		\$634,441 FIX	14	\$691,730								
	02	27	27200	LABOR	NR	111	\$41,645 Peak bus, rail vehicles	6	\$272,433								
	02	27	27200	LABOR	NR	113	\$44,787 Peak bus, rail vehicles	7	\$341,818								
	02	27	27200	LABOR	R	502	\$25,146 Peak bus, rail vehicles	1	\$27,417								
	02	27	27200	FRINGE			\$253,614 Office wages		\$322,033								
	02	27	27200	SERV			\$17,500 Peak bus, rail vehicles		\$22,852								
	02	27	27200	MATL			\$17,500 Office empl.		\$22,260								
	02	27	27200	OTHER			\$10,000 Peak bus, rail vehicles		\$15,843								
	02	28	28000	LABOR	NR		\$302,853 FIX	7	\$330,200								
	Marketing Salaries and Wages Account Representative Editor/Marketing Associate Photographer/Multimedia Fringe Benefits Print, Reproduc., & Other Svcs. Materials and Supplies Advertising & Promotion Other Non-Operating Expenses	02	28	28000	LABOR	NR		\$302,853 FIX	7	\$330,200							
02		28	28000	LABOR	NR	114	\$32,089 Bus, train hours	5	\$174,933								
02		28	28000	LABOR	NR	115	\$37,939 Bus, train hours	7	\$269,557								
02		28	28000	LABOR	NR	116	\$29,762 Bus, train hours	3	\$84,076								
02		28	28000	FRINGE			\$146,781 Office wages		\$192,261								
02		28	28000	SERV			\$443,800 Office empl.		\$591,402								
02		28	28000	MATL			\$87,000 Office empl.		\$115,935								
02		28	28000	MISC			\$872,000 Bus, train hours		1,270,329								
02		28	28000	OTHER			\$76,500 Office empl.		\$101,943								
04		44	44110	LABOR	NR		\$228,417 FIX	3	\$249,043								
04		44	44110	FRINGE			\$56,353 Office wages		\$81,441								
04		44	44110	SERV			\$14,280 Office empl.		\$15,569								
04		44	44110	MATL			\$1,500 Office empl.		\$1,635								
04	44	44110	OTHER			\$20,000 Office empl.		\$21,806									
OPERATIONS AND DEVELOPMENT																	
EVP Operations & Development																	
04	44	44110	LABOR	NR		\$228,417 FIX			\$249,043								
04	44	44110	FRINGE			\$56,353 Office wages			\$81,441								
04	44	44110	SERV			\$14,280 Office empl.			\$15,569								
04	44	44110	MATL			\$1,500 Office empl.			\$1,635								
04	44	44110	OTHER			\$20,000 Office empl.			\$21,806								

MARTA O&M COST MODEL

Line Item Detail

NSAS Alt. 1
HRT & LRT

Cost Item	Div	Dept	Office	Cost Type	Labor Status	Pos. Code	Baseline Unit Cost	Cost Driver	ESTIMATED		DEPARTMENT/COST CENTER					Total Cost
									Head-Count	Cost	Total Headcount	Cap/Opn Distrib.	Cap. Opn.	Non-Rep.	PT/Contr.	
Quality Assurance																
Salaries and Wages	04	44	44200	LABOR	NR		\$574,004	FIX	10	\$625,922	31	0	30	1	0	\$2,329,837
QA Engineer VI	04	44	44200	LABOR	NR	117	\$56,949	Peak bus, rail vehicles	3	\$186,274						
QA Engineer V	04	44	44200	LABOR	NR	118	\$52,890	Peak bus, rail vehicles	17	\$880,312						
Secretary/Word Processor	04	44	44200	LABOR	R	505	\$25,146	FIX	1	\$27,417						
Overtime (straight-time empl)	04	45	44200	LABOR			\$5,005	Office NR wages		\$6,783						
Fringe Benefits	04	44	44200	FRINGE			\$317,410	Office wages		\$428,601						
Contractual Services	04	44	44200	SERV			\$21,800	Office empl.		\$29,473						
Materials and Supplies	04	44	44200	MATL			\$18,400	Office empl.		\$24,876						
Other Non-Operating Expenses	04	44	44200	OTHER			\$15,000	Office empl.		\$20,280						
VP Development																
Salaries and Wages	04	45	45100	LABOR	NR		\$580,959	FIX	9	\$611,612	10	0	9	0	1	\$848,856
Administrative Assistant	04	45	45100	LABOR	PTIC	910	\$25,582	FIX	1	\$27,892						
Fringe Benefits	04	45	45100	FRINGE			\$127,316	Office wages		\$138,812						
Contractual Services	04	45	45100	SERV			\$25,000	Office empl.		\$27,257						
Materials and Supplies	04	45	45100	MATL			\$3,500	Office empl.		\$3,616						
Other Non-Operating Expenses	04	45	45100	OTHER			\$36,200	Office empl.		\$39,469						
Facilities Engineering																
Salaries and Wages	04	45	45200	LABOR	NR		\$581,334	FIX	9	\$633,827	89	0	89	0	0	\$8,773,635
Salaries and Wages	04	45	45200	LABOR	NR		\$52,068	Rail stations, route-miles	80	\$4,541,437						
Overtime (straight-time empl)	04	45	45200	LABOR	NR		\$4,142	Office NR wages		\$10,787						
Fringe Benefits	04	45	45200	FRINGE			\$444,163	Office wages		\$1,156,775						
Contractual Services	04	45	45200	SERV			\$36,800	Rail stations, route-miles		\$115,872						
Materials and Supplies	04	45	45200	MATL			\$7,210	Office empl.		\$19,434						
Miscellaneous Expenses	04	45	45200	MISC			\$12,000	Office empl.		\$32,345						
Other Non-Operating Expenses	04	45	45200	OTHER			\$97,630	Office empl.		\$263,158						
Construction & Contract Admin.																
Salaries and Wages	04	45	45300	LABOR	NR		\$554,584	FIX	20	\$604,640	38	0	38	0	0	\$3,846,481
Salaries and Wages	04	45	45300	LABOR	NR		\$127,167	Rail stations, route-miles	18	\$2,485,691						
Overtime (straight-time empl)	04	45	45300	LABOR			\$16,843	Office NR wages		\$39,633						
Fringe Benefits	04	45	45300	FRINGE			\$272,050	Office wages		\$840,156						
Materials and Supplies	04	45	45300	MATL			\$21,900	Office empl.		\$34,888						
Miscellaneous Expenses	04	45	45300	MISC			\$6,000	Office empl.		\$9,581						
Other Non-Operating Expenses	04	45	45300	OTHER			\$15,000	Office empl.		\$23,903						
Program Management																
Salaries and Wages	04	45	45400	LABOR	NR		\$894,356	FIX	15	\$975,114	24	0	24	0	0	\$1,761,725
Salaries and Wages	04	45	45400	LABOR	NR		\$34,903	Rail stations, route-miles	9	\$324,489						
Fringe Benefits	04	45	45400	FRINGE			\$249,346	Office wages		\$328,847						
Contractual Services	04	45	45400	SERV			\$23,800	Rail stations, route-miles		\$74,309						
Materials and Supplies	04	45	45400	MATL			\$9,080	Office empl.		\$13,200						
Telephone	04	45	45400	UTIL			\$1,500	Office empl.		\$2,181						
Miscellaneous Expenses	04	45	45400	MISC			\$2,800	Office empl.		\$3,780						
Other Non-Operating Expenses	04	45	45400	OTHER			\$15,000	Office empl.		\$21,806						
Systems Engineering																
Salaries and Wages	04	45	45500	LABOR	NR		\$553,557	FIX	9	\$603,542	38	0	37	1	0	\$2,947,266
Salaries and Wages	04	45	45500	LABOR	NR		\$55,124	Peak railcars, route-miles	24	\$1,442,428						
Transit Vehicle Engineer	04	45	45500	LABOR	NR	119	\$98,916	Peak railcars	4	\$281,305						
Secretary/Word Processor	04	45	45500	LABOR	R	513	\$12,573	FIX	1	\$13,708						
Fringe Benefits	04	45	45500	FRINGE			\$251,785	Office wages		\$518,558						
Materials and Supplies	04	45	45500	MATL			\$4,480	Office empl.		\$9,281						
Miscellaneous Expenses	04	45	45500	MISC			\$2,000	Office empl.		\$4,143						
Other Non-Operating Expenses	04	45	45500	OTHER			\$45,522	Office empl.		\$84,302						
V.P. Facilities Maintenance																
Salaries and Wages	04	46	46100	LABOR	NR		\$246,100	FIX	5	\$268,322	5	0	5	0	0	\$382,559

MARTA O&M COST MODEL

Line Item Detail

NSAS AIL 1
HRT & LRT

Cost Item	Div	Dept	Office	Cost Type	Labor Status	Pos. Code	Baseline Unit Cost	Cost Driver	Head-Count	ESTIMATED				DEPARTMENT/COST CENTER				Total Cost
										Count	Cost	Headcount	Cap/Ops	Cap. Distrib.	Non-Rep.	Rep.	PT/Contr.	
Overtime (straight-time empl)	04	46	46100	LABOR	NR		\$3,024	Office NR wages			\$3,297							
Fringe Benefits	04	46	46100	FRINGE	NR		\$57,408	Office wages			\$62,592							
Contractual Services	04	46	46100	SERV	NR		\$10,000	Office empl			\$10,903							
Materials and Supplies	04	46	46100	MATL	NR		\$4,000	Office empl			\$4,381							
Other Non-Operating Expenses	04	46	46100	OTHER	NR		\$12,000	Office empl			\$13,084							
Track & Structures	04	46	46200	LABOR	NR		\$111,164	FIX			\$121,202							
Salaries and Wages	04	46	46200	LABOR	NR	121	\$66,055	Rail route-miles			\$69,255							
Manager, Track & Structures	04	46	46200	LABOR	NR	122	\$44,477	# T&S field personnel			\$1,066,855							
Foreman, Track & Structures	04	46	46200	LABOR	NR	172	\$39,756	Rail route-miles			\$390,113							
Planner, Track & Structures	04	46	46200	LABOR	NR	173	\$23,602	Rail route-miles			\$102,933							
Staff Assistant I	04	46	46200	LABOR	NR	557	\$23,988	FIX			\$26,154							
Secretary, Track & Structures	04	46	46200	LABOR	R	507	\$37,047	Rail route-miles			\$727,081							
Journeyman Mechanic	04	46	46200	LABOR	R	508	\$36,339	Rail route-miles			\$2,654,552							
Track Walker	04	46	46200	LABOR	R	509	\$36,481	Rail route-miles			\$158,101							
Tamper Operator	04	46	46200	LABOR	R	510	\$36,481	Rail route-miles			\$1,233,039							
Structural Inspection Tech	04	46	46200	LABOR	R	511	\$35,372	Rail route-miles			\$6,556,134							
Track Maintainer	04	46	46200	LABOR	R	512	\$30,828	Rail route-miles			\$1,045,343							
Track Apprentice	04	46	46200	LABOR	R		\$70,678	Office NR wages			\$336,901							
Overtime (straight-time empl)	04	46	46200	LABOR	NR		\$792,245	Office R wages			\$3,823,344							
Fringe Benefits	04	46	46200	FRINGE	NR		\$921,146	Office wages			\$4,344,385							
Contractual Services	04	46	46200	SERV	NR		\$288,500	Rail route-miles			\$1,405,411							
Materials and Supplies	04	46	46200	MATL	NR		\$655,012	Rail route-miles			\$3,190,852							
Miscellaneous Expenses	04	46	46200	MISC	NR		\$150	Office empl			\$707							
Other Non-Operating Expenses	04	46	46200	OTHER	NR		\$30,000	Office empl			\$141,485							
Electrical & Communications	04	46	46300	LABOR	NR		\$183,078	FIX			\$210,510							
Salaries and Wages	04	46	46300	LABOR	R	515	\$36,715	Peak railcars, route-miles			\$1,080,804							
Electronic Technician	04	46	46300	LABOR	NR		\$56,284	FIX			\$61,377							
Manager-Power	04	46	46300	LABOR	NR	124	\$40,266	FIX			\$43,902							
Maintenance Planner	04	46	46300	LABOR	NR	174	\$39,272	Rail route-miles			\$171,273							
Electrical Engineer V	04	46	46300	LABOR	NR	175	\$50,092	FIX			\$54,815							
Corrosion Control Engineer	04	46	46300	LABOR	NR	176	\$51,341	FIX			\$55,977							
Gen. Foreman-Power	04	46	46300	LABOR	NR	126	\$43,178	# Power Techs			\$1,035,701							
Foreman-Power	04	46	46300	LABOR	R	127	\$36,650	Rail route-miles			\$6,433,387							
Power Technician	04	46	46300	LABOR	R	514	\$31,146	# Power Techs			\$747,079							
Apprentice Technician	04	46	46300	LABOR	R	520	\$42,681	Rail route-miles			\$106,053							
Maint. Inspector-Power	04	46	46300	LABOR	NR	177	\$25,146	FIX			\$27,417							
Secretary, Power	04	46	46300	LABOR	R	558	\$67,774	FIX			\$73,894							
Train Control	04	46	46300	LABOR	NR	178	\$56,728	FIX			\$61,851							
Manager-Train Control	04	46	46300	LABOR	NR	179	\$40,266	FIX			\$43,902							
Train Control Engineer	04	46	46300	LABOR	NR	174	\$51,358	FIX			\$55,996							
Maintenance Planner	04	46	46300	LABOR	NR	180	\$46,087	# Train Control Techs			\$502,483							
Gen. Foreman-Train Control	04	46	46300	LABOR	NR	181	\$36,715	Peak railcars			\$3,042,263							
Foreman-Train Control	04	46	46300	LABOR	R	516	\$31,146	# Train Control Techs			\$203,749							
Train Control Technician	04	46	46300	LABOR	R	520	\$12,573	FIX			\$13,708							
Apprentice Technician	04	46	46300	LABOR	R	513	\$46,175	FIX			\$50,344							
Secretary/Word Processor	04	46	46300	LABOR	NR	183	\$40,266	FIX			\$43,902							
Communic. & Faregates	04	46	46300	LABOR	NR	174	\$51,358	FIX			\$55,996							
Manager-Communic. & Faregate	04	46	46300	LABOR	NR	182	\$40,025	# Faregate Techs			\$130,317							
Maintenance Planner	04	46	46300	LABOR	NR	184	\$36,715	Rail stations			\$1,361,013							
Gen. Foreman-Faregates	04	46	46300	LABOR	NR	184												
Foreman-Faregates	04	46	46300	LABOR	R	515												
Electronic Technician	04	46	46300	LABOR	R	515												

MARTA O&M COST MODEL
Line Item Detail

NSAS AIL 1
HRT & LRT

Cost Item	Div	Dept	Office	Cost Type	Labor Status	Pos. Code	Baseline Unit Cost	Cost Driver	Head-Count	ESTIMATED				DEPARTMENT/COST CENTER					Total Cost
										Cost	Total Headcount	Cap/Op	Dist.	Non-Rep	FullPart	Time	Dist.	PT/Contr.	
Apprentice Technician	04	46	46300	LABOR	R	520	\$31,146 # Fangate Techs		3	\$101,874									
Gen. Foreman-Communications	04	46	46300	LABOR	NR	185	\$51,358 FIX		1	\$55,986									
Foreman-Communication	04	46	46300	LABOR	NR	186	\$42,970 # Communic Techs		4	\$187,402									
Electronic Technician	04	46	46300	LABOR	R	515	\$36,715 Rail stations		33	\$1,320,983									
Apprentice Technician	04	46	46300	LABOR	R	520	\$31,146 # Communic Techs		1	\$33,958									
Secretary	04	46	46300	LABOR	R	508	\$27,594 FIX		1	\$30,088									
Overtime (straight-time empl)	04	46	46300	LABOR			\$196,908 Office NR wages			\$421,812									
Overtime (hourly empl)	04	46	46300	LABOR			\$983,362 Office R wages			\$2,742,140									
Fringe Benefits	04	46	46300	FRINGE			\$1,957,061 Office wages			\$5,088,581									
Contractual Services	04	46	46300	SERV			\$288,000 Peak railcars, route-miles			\$875,988									
Materials and Supplies	04	46	46300	MATL			\$1,075,700 Peak railcars, route-miles			\$3,542,460									
Station Power	04	46	46300	UTIL			\$5,900,547 Rail car-miles			\$12,350,900									
Station Power	04	46	46300	UTIL			\$3,939,698 Rail stations			\$5,727,258									
Other Non-Operating Expenses	04	46	46300	OTHER			\$25,000 Office empl.			\$65,693									
Buildings & Grounds									330		330	0	53	277	0				\$28,078,888
Salaries and Wages	04	46	46400	LABOR	NR		\$328,169 FIX		7	\$357,802									
Manager	04	46	46400	LABOR	NR	128	\$61,779 FIX		2	\$134,715									
Secretary/Word Processor	04	46	46400	LABOR	R	505	\$25,148 FIX		2	\$64,833									
General Foreman	04	46	46400	LABOR	NR	129	\$47,283 # Foremen		4	\$208,208									
Foreman	04	46	46400	LABOR	NR	130	\$37,915 # Jourm. Service, Appren.		20	\$828,777									
Journeyman	04	46	46400	LABOR	R	518	\$39,208 Garages, stations, yards		75	\$2,940,780									
Apprentice Technician	04	46	46400	LABOR	R	520	\$31,146 Garages, stations, yards		7	\$237,707									
Serviceperson V	04	46	46400	LABOR	R	519	\$35,480 Garages, stations, yards		14	\$541,574									
Apprentice Building Mechanic	04	46	46400	LABOR	R	522	\$28,549 Garages, stations, yards		60	\$1,723,694									
Building & Ground Specialist	04	46	46400	LABOR	R	523	\$31,278 Garages, stations, yards		14	\$477,425									
General Foreman	04	46	46400	LABOR	R	521	\$20,169 FIX		1	\$22,023									
Foreman	04	46	46400	LABOR	NR	128	\$47,283 # Station Foremen		7	\$51,552									
Rail Station Cleaner	04	46	46400	LABOR	R	130	\$37,915 # Rail Cleaners		104	\$2,602,309									
Contract Administrator	04	46	46400	LABOR	R	133	\$44,340 FIX		2	\$96,687									
Contract Services Coordinator	04	46	46400	LABOR	NR	132	\$44,025 Garages, stations, yards		3	\$144,061									
Facilities Inspector	04	46	46400	LABOR	NR	131	\$37,989 Garages, stations, yards		7	\$288,932									
Overtime (straight-time empl)	04	46	46400	LABOR			\$127,928 Office NR wages			\$177,468									
Overtime (hourly empl)	04	46	46400	LABOR			\$454,307 Office R wages			\$879,381									
Fringe Benefits	04	46	46400	FRINGE			\$2,298,420 Office wages			\$3,376,528									
Contractual Svcs - Elev/Esca	04	46	46400	SERV			\$2,383,000 Rail stations			\$3,464,239									
Contractual Services	04	46	46400	SERV			\$3,008,538 Garages, stations, yards			4,249,350									
Materials and Supplies	04	46	46400	MATL			\$1,105,487 Office empl.			\$1,630,132									
Water, Gas, Electricity	04	46	46400	UTIL			\$1,118,200 75% gar & yard; 25% sta			1,435,066									
Miscellaneous Expenses	04	46	46400	MISC			\$300 Office empl			\$442									
Other Non-Operating Expenses	04	46	46400	OTHER			\$33,000 Office empl.			\$49,681									
Senior V.P. Operations									2		2	2	0	2	0				\$372,711
Salaries and Wages	04	47	47110	LABOR	NR		\$145,906 FIX			\$159,081									
Fringe Benefits	04	47	47110	FRINGE			\$34,037 Office wages			\$37,111									
Contractual Services	04	47	47110	SERV			\$120,000 Office empl.			\$130,838									
Materials and Supplies	04	47	47110	MATL			\$4,500 Office empl.			\$4,906									
Telephone	04	45	47110	UTIL			\$2,000 Office empl.			\$2,181									
Other Non-Operating Expenses	04	47	47110	OTHER			\$35,400 Office empl.			\$38,597									
Bus Transportation									1,859		1,859	0	111	1,451	297				\$87,836,338
Salaries and Wages	04	47	47200	LABOR	NR		\$173,555 FIX		4	\$189,554									
General Superintendent (Bus)	04	47	47200	LABOR	NR	134	\$82,654 Bus garages		4	\$274,116									
Superintendent (Bus)	04	47	47200	LABOR	NR	135	\$52,940 Bus garages		8	\$481,841									
Assistant Superintendent (Bus)	04	47	47200	LABOR	NR	137	\$38,520 # Division Dispatchers		3	\$126,976									

MARTA O&M COST MODEL

Line Item Detail

NSAS Alt. 1
HRT & LRT

Cost Item	Div	Dept	Office	Cost Type	Labor Status	Pos. Code	Baseline Unit Cost	Cost Driver	Head-Count	ESTIMATED		DEPARTMENT/COST CENTER				Total Cost	
										Cost	Total Headcount	Cap/Ops	Distrib.	Fullpart Time Distrib.	PT/Contr.		
Dispatcher	04	47	47200	LABOR	NR	138	\$36,062	Peak buses	32	\$1,258,179							
Transportation Supervisor	04	47	47200	LABOR	NR	139	\$38,820	# FT & PT Bus Operators	29	\$1,227,428							
Bus Operator	04	47	47200	LABOR	R	527	\$33,263	Bus-hours	1371	\$49,721,402							
Clerk Typist	04	47	47200	LABOR	R	528	\$23,311	Bus garages	4	\$101,664							
Transfer Clerk	04	47	47200	LABOR	R	529	\$25,146	FIX	1	\$27,417							
Bus Operator	04	47	47200	LABOR	PTIC	908	\$14,271	# FT Bus Operators	263	\$4,092,258							
(Paratransit Operations)																	
Salaries and Wages	04	47	47200	LABOR	NR		\$409,219	FIX	10	\$446,171							
Paratransit Dispatcher	04	47	47200	LABOR	NR	140	\$30,622	Demand response fleet	5	\$168,937							
Paratransit Supervisor	04	47	47200	LABOR	NR	141	\$30,170	# FT, PT Paratran oper	3	\$98,683							
Other Paratransit Staff	04	47	47200	LABOR	NR		\$26,959	Demand response hours	13	\$382,116							
Paratransit Operator	04	47	47200	LABOR	R	530	\$19,507	Demand response hours	75	\$1,595,167							
Paratransit Operator	04	47	47200	LABOR	PTIC	907	\$11,333	# FT Paratran Operators	30	\$370,700							
Paratransit Agent	04	47	47200	LABOR	PTIC	908	\$12,470	Demand response hours	4	\$54,382							
(Bus + Paratransit)																	
Overline, Operators	04	47	47200	LABOR			\$8,901,839	FT operator wages		\$8,338,913							
Overtime (hourly empl)	04	47	47200	LABOR			\$10,000	Other office R wages		\$10,903							
Overtime (straight-time empl)	04	47	47200	LABOR			\$0	Office NR wages		\$0							
Fringe Benefits	04	47	47200	FRINGE			\$13,677,245	Total office wages		\$16,438,740							
Contractual Services	04	47	47200	SERV			\$172,200	Office empl.		\$205,672							
Materials & Supplies	04	47	47200	MATL			\$282,525	Office empl.		\$337,442							
Casualty & Liability Costs	04	47	47200	INS			\$1,439,001	Office empl.		\$1,718,715							
Miscellaneous Expenses	04	47	47200	MISC			\$57,000	Office empl.		\$68,080							
Other Non-Operating Expenses	04	47	47200	OTHER			\$102,884	Office empl.		\$122,883							
Rail Transportation	04	47	47300								716	716	0	295	421	0	\$43,987,552
Salaries and Wages	04	47	47300	LABOR	NR		\$293,137	FIX	6	\$275,995							
Superintendent (Chief Controller)	04	47	47300	LABOR	NR	142	\$53,113	HR+LR rail yards	5	\$289,545							
Asst. Superintendent (Controller)	04	47	47300	LABOR	NR	143	\$45,051	HR+LR route-miles	125	\$6,139,807							
General Superintendent (Rail)	04	47	47300	LABOR	NR	145	\$61,988	Rail yards + 1 (Cent Ctr)	6	\$405,512							
Communications Specialist	04	47	47300	LABOR	NR	146	\$21,770	HR+LR rail yards	5	\$118,679							
Superintendent (Rail)	04	47	47300	LABOR	NR	144	\$50,429	HR+LR rail yards	18	\$989,687							
Supervisor - Rail Operations	04	47	47300	LABOR	NR	147	\$38,820	# Rail Operators	103	\$4,359,488							
Supervisor - Car Appearance	04	47	47300	LABOR	NR	148	\$38,820	HR+LR peak cars	27	\$1,142,778							
Rail Transportation Assistant	04	47	47300	LABOR	R	531	\$23,602	HR+LR rail yards	3	\$77,200							
Rail Operator	04	47	47300	LABOR	R	532	\$33,820	HR+LR train-hours	346	\$12,758,177							
Rail Car Cleaner	04	47	47300	LABOR	R	545	\$25,008	HR+LR peak cars	72	\$1,963,009							
Overtime (straight-time empl)	04	47	47300	LABOR			\$691,833	Office NR wages		\$864,063							
Overtime, Operators	04	47	47300	LABOR			\$105,583	Operator wages		\$1,279,359							
Overtime (other hourly empl)	04	47	47300	LABOR			\$3,547,816	Other R wages		\$7,771,135							
Fringe Benefits	04	47	47300	FRINGE			\$20,000	Total office wages		\$42,659							
Contractual Services	04	47	47300	SERV			\$20,000	Office empl.		\$42,659							
Materials and Supplies	04	47	47300	MATL			\$213,825	Office empl.		\$456,074							
Casualty & Liability	04	47	47300	INS			\$2,318,600	Office empl.		\$4,946,416							
Miscellaneous Expenses	04	46	47300	MISC			\$1,000	Office empl.		\$2,133							
Other Non-Operating Expenses	04	47	47300	OTHER			\$40,000	Office empl.		\$85,317							
Bus Maintenance	04	47	47400								621	621	0	56	565	0	\$69,082,712
Salaries and Wages	04	47	47400	LABOR	NR		\$343,256	FIX	7	\$374,251							
General Supt., Bus Maint.	04	47	47400	LABOR	NR	150	\$63,040	Bus Garages	4	\$274,829							
Superintendent, Bus Maint.	04	47	47400	LABOR	NR	151	\$54,534	# Bus Line Foremen	6	\$356,748							
Bus Maintenance Supervisor	04	47	47400	LABOR	NR	152	\$41,181	# Mech., Insp., Svc.	32	\$1,436,780							
Salaries and Wages	04	47	47400	LABOR	R		\$36,128	Bus Garages	12	\$472,880							
Clerk, Bus Maint.	04	47	47400	LABOR	R	533	\$24,539	Bus Garages	6	\$160,560							
Diesel Bus Mechanic	04	47	47400	LABOR	R	534	\$36,339	Diesel bus-miles	0	\$0							
CNG Bus Mechanic	04	47	47400	LABOR	R	535	\$38,339	CNG bus-miles	330	\$13,074,655							

MARTA O&M COST MODEL
Line Item Detail

NSAS Alt. 1
HRT & LRT

Cost Item	Div	Dept	Office	Cost Type	Labor Status	Pos. Code	Baseline Unit Cost	Cost Driver	ESTIMATED				DEPARTMENT/COST CENTER				Total Cost
									Head-Count	Cost	Total Headcount	Cap/Ops	Distrib. Cap.	Non-Rep.	Full/Part Time Distrib. Rep.	P/T/Contr.	
Apprentices Bus Mechanic	04	47	47400	LABOR	R	559	\$31,276 # Diesel & CNG Mech's		108	\$3,642,984							
Bus Serviseperson	04	47	47400	LABOR	R	536	\$27,527 Bus-miles		94	\$2,621,160							
(Paratransit Maintenance)																	
Gen Supt. Para & Non-Rev Veh	04	47	47400	LABOR	NR	154	\$61,895 Paratransit Garages		1	\$67,266							
Para & Non-Rev Veh Supt.	04	47	47400	LABOR	NR	156	\$52,949 Paratransit Garages		1	\$57,730							
Paratransit Maint. Supervisor	04	47	47400	LABOR	NR	155	\$41,181 # Mech's, Svc.		5	\$224,487							
Paratransit Mech Journeyman	04	47	47400	LABOR	R	537	\$35,432 Paratran. veh-miles		8	\$308,047							
Paratransit Serviseperson	04	47	47400	LABOR	R	538	\$16,409 Paratran. veh-miles		7	\$125,233							
(Bus + Paratransit)																	
Overtime (hourly empl)	04	47	47400	LABOR			\$2,680,000 Office R wages			\$3,473,088							
Overtime (straight-time empl)	04	47	47400	LABOR			\$0 Office NR wages			\$0							
Fringe Benefits	04	47	47400	FRINGE			\$5,743,121 Total office wages			\$7,390,741							
Contractual Services	04	47	47400	SERV			\$3,264,275 Office empl			\$4,181,002							
Diesel Bus Parts/Lube	04	47	47400	MATL			\$6,717,860 Diesel vehicle-miles			\$16,938,766							
CNG Bus Parts/Lube	04	47	47400	MATL			\$2,324,900 CNG vehicle-miles			\$2,449,483							
Non-Rev Veh Parts/Lube	04	47	47400	MATL			\$2,195,250 Paratransit veh-miles			\$597,854							
Other Materials & Supplies	04	47	47400	MATL			3.084% of rev-veh parts/lube			\$166,530							
Diesel Fuel	04	47	47400	FUEL			\$136,000 Bus+paratran. veh-miles			\$0							
Compressed Natural Gas	04	47	47400	FUEL			\$1,390,000 Diesel vehicle-miles			\$10,127,268							
Fuel, Paratransit Veh	04	47	47400	FUEL			\$247,000 Paratransit veh-miles			\$275,605							
Fuel, Paratransit Veh	04	47	47400	FUEL			\$258,000 Peak buses			\$321,872							
Gasoline, Non-Revenue Veh.	04	47	47400	FUEL			28.051% Diesel & gasoline fuel cost			\$167,628							
Fuel Taxes	04	47	47400	MISC			\$20,000 Office empl.			\$25,695							
Miscellaneous Expenses	04	47	47400	MISC			\$100,000 Office empl.			\$128,477							
Other Non-Operating Expenses	04	47	47400	OTHER													
HRV Maintenance	04	47	47500	LABOR	NR				394		394	0	54	340	0		\$36,126,331
Salaries and Wages	04	47	47500	LABOR	NR		\$364,470 FIX		7	\$397,361							
Gen Supt. Rail Car Maint.	04	47	47500	LABOR	NR	158	\$71,479 HR yards		3	\$233,800							
Transportation Assistant	04	47	47500	LABOR	NR	159	\$23,602 HR yards		3	\$77,200							
Superintendent, Rail Car Maint.	04	47	47500	LABOR	NR	162	\$57,523 HR yards		4	\$250,868							
Supervisor, Rail Car Maint.	04	47	47500	LABOR	NR	164	\$41,181 # Mech's, Techns, Svc.		37	\$1,661,278							
Rail Car Mechanic	04	47	47500	LABOR	R	541	\$36,296 HR vehicle-miles		159	\$6,282,234							
Apprentice Mechanic	04	47	47500	LABOR	R	542	\$31,477 # Mechanics		10	\$343,197							
Electronic Technician	04	47	47500	LABOR	R	543	\$36,126 HR vehicle-miles		138	\$5,435,533							
Apprentice Electronic Tech.	04	47	47500	LABOR	R	544	\$31,478 # Elec. Technicians		11	\$377,528							
Serviseperson	04	47	47500	LABOR	R	546	\$25,953 HR peak cars		22	\$622,521							
Overtime (straight-time empl)	04	47	47500	LABOR			\$68,104 Office NR wages			\$84,817							
Overtime (hourly empl)	04	47	47500	LABOR			\$862,373 Office R wages			\$1,480,942							
Fringe Benefits	04	47	47500	FRINGE			\$2,597,433 Office wages			\$4,381,853							
Contractual Services	04	47	47500	SERV			\$2,377,000 HR vehicle-miles			\$4,168,945							
Materials and Supplies	04	47	47500	MATL			\$5,770,587 HR vehicle-miles			\$10,120,850							
Other Non-Operating Expenses	04	47	47500	OTHER			\$99,365 Office empl.			\$169,385							
LRV Maintenance	04	47	47600	LABOR	NR				84		84	0	6	78	0		\$11,724,262
Gen Supt. Rail Car Maint.	04	47	47600	LABOR	NR	158	\$71,479 LR yards		2	\$155,867							
Transportation Assistant	04	47	47600	LABOR	NR	159	\$23,602 LR yards		2	\$51,466							
Superintendent, Rail Car Maint.	04	47	47600	LABOR	NR	162	\$57,523 LR yards		2	\$125,434							
Rail Car Mechanic	04	47	47600	LABOR	R	541	\$36,286 LR vehicle-miles		38	\$1,503,804							
Apprentice Mechanic	04	47	47600	LABOR	R	542	\$31,477 # Mechanics		2	\$68,639							
Electronic Technician	04	47	47600	LABOR	R	543	\$36,126 LR vehicle-miles		30	\$1,181,638							
Apprentice Electronic Tech.	04	47	47600	LABOR	R	544	\$31,478 # Elec. Technicians		3	\$102,982							
Serviseperson	04	47	47600	LABOR	R	546	\$25,953 LR peak cars		5	\$141,482							
Overtime (straight-time empl)	04	47	47600	LABOR			3.62% Office NR wages			\$12,040							
Overtime (hourly empl)	04	47	47600	LABOR			11.41% Office R wages			\$342,026							
Fringe Benefits	04	47	47600	FRINGE			25.42% Total office wages			\$936,811							

MARTA O&M COST MODEL

Line Item Detail

NSAS Alt. 1
HRT & LRT

Cost Item	Div	Dsp't	Office	Cost Type	Labor Status	Pos. Code	Baseline Unit Cost	Cost Driver	ESTIMATED				DEPARTMENT/COST CENTER					Total Cost
									Head-Count	Cost	Total Headcount	Cap/Ops	Dispers.	Non-Rep.	Full/Part	Time Dispers.	PT/Cont.	
Revenue Vehicle Components	04	47	47600	SERV	NR		\$0.10 per LR vehicle-mile			\$887,810								
Other Services	04	47	47600	SERV	NR		\$0.10 per LR vehicle-mile			\$887,810								
Materials and Supplies	04	47	47600	MATL	NR		\$0.51 per LR vehicle-mile			\$5,037,830								
Fuel & Lubr's.	04	47	47600	FUEL	NR		\$722 per LR peak car			\$52,742								
Miscellaneous Expenses	04	47	47600	MISC	NR		\$392 per office empl.			\$35,901								
Operations Support									103		103	103	0	52	51	0	0	\$6,126,435
Salaries and Wages	04	47	47700	LABOR	NR		\$918,144 FIX		20	\$1,001,050								
Project Administrator	04	47	47700	LABOR	NR	160	\$57,031 2 Fixed; plus 1 if LRT		3	\$186,541								
Contract Administrator	04	47	47700	LABOR	NR	161	\$45,051 2 Fixed; plus 1 if LRT		3	\$147,355								
Supervisor, Stores	04	47	47700	LABOR	NR	163	\$47,864 3 Fixed; plus 1 if LRT		4	\$207,873								
Bus Maintenance Planner	04	47	47700	LABOR	NR	157	\$42,586 Peak buses		17	\$789,527								
Inventory Specialist	04	47	47700	LABOR	NR	153	\$38,405 Garages		2	\$83,746								
Inventory Specialist	04	47	47700	LABOR	NR	153	\$38,405 HR yards		1	\$41,873								
Inventory Specialist	04	47	47700	LABOR	NR	153	\$38,405 LR yards		2	\$83,746								
Material Controller	04	47	47700	LABOR	R	504	\$34,818 Garages		31	\$1,176,819								
Material Controller	04	47	47700	LABOR	R	504	\$34,818 HR yards		10	\$379,619								
Material Controller	04	47	47700	LABOR	R	504	\$34,818 LR yards		10	\$379,619								
Overtime (straight-time empl)	04	47	47700	LABOR	NR		\$0 Office NR wages			\$0								
Overtime (hourly empl)	04	47	47700	LABOR	NR		\$173,358 Office R wages			\$235,112								
Fringe Benefits	04	47	47700	FRINGE	NR		\$940,567 Office wages			\$1,224,406								
Contractual Services	04	47	47700	SERV	NR		\$45,000 Plan & Matl empl.			\$59,577								
Materials and Supplies	04	47	47700	MATL	NR		\$40,975 Office empl.			\$53,506								
Telephone	04	47	47700	UTIL	NR		\$4,500 Office empl.			\$5,876								
Miscellaneous Expenses	04	47	47700	MISC	NR		\$3,750 Office empl.			\$4,897								
Other Non-Operating Expenses	04	47	47700	OTHER	NR		\$50,000 Office empl.			\$65,291								
Police Services									468		468	468	0	464	4	0	0	\$26,280,716
Salaries and Wages	04	48	48100	LABOR	NR		\$642,235 FIX		14	\$700,227								
Transit Police Captain	04	48	48100	LABOR	NR	165	\$55,976 # Lieutenants		8	\$485,626								
Transit Police Lieutenant	04	48	48100	LABOR	NR	166	\$50,406 # Sergeants, Officers		15	\$824,362								
Transit Police Sergeant	04	48	48100	LABOR	NR	167	\$40,555 Garages, stations, yards		46	\$2,033,980								
Transit Police Officer	04	48	48100	LABOR	NR	168	\$28,401 Stations, pbuses, t-hrs		341	\$10,559,207								
Criminal Justice Info. Tech	04	48	48100	LABOR	NR	169	\$27,741 Stations, pbuses, t-hrs		40	\$1,209,659								
Clerk Typist	04	48	48100	LABOR	R	551	\$23,311 Stations, pbuses, t-hrs		3	\$70,246								
Security Guard	04	48	48100	LABOR	R	552	\$26,475 FIX		1	\$26,866								
Overtime (hourly empl)	04	47	48100	LABOR	NR		\$2,143,740 Wages, post. 107-169			\$3,421,642								
Overtime (straight-time empl)	04	47	48100	LABOR	NR		\$556,004 Other office NR wages			\$502,322								
Fringe Benefits	04	48	48100	FRINGE	NR		\$3,786,498 Office wages			\$5,841,503								
Contractual Services	04	48	48100	SERV	NR		\$109,000 Office empl.			\$172,193								
Materials and Supplies	04	48	48100	MATL	NR		\$140,000 Office empl.			\$221,165								
Miscellaneous Expenses	04	48	48100	MISC	NR		\$26,000 Office empl.			\$41,074								
Other Non-Operating Expenses	04	48	48100	OTHER	NR		\$30,530 Office empl.			\$62,446								
BUSINESS MANAGEMENT									2		2	2	0	2	0	0	0	\$284,740
DGM/EVP Business Management																		
Salaries and Wages	08	81	81100	LABOR	NR		\$194,048 FIX		2	\$211,571								
Fringe Benefits	08	81	81100	FRINGE	NR		\$40,809 Office wages			\$44,484								
Contractual Services	08	81	81100	SERV	NR		\$600 Office empl.			\$654								
Materials and Supplies	08	81	81100	MATL	NR		\$600 Office empl.			\$654								
Other Non-Operating Expenses	08	81	81100	OTHER	NR		\$25,100 Office empl.			\$27,366								
Business Mgt. & Financ. Analy.																		
Salaries & Wages	08	81	81200	LABOR	NR	171	\$609,027 FIX		11	\$684,021								
Business Analyst	08	81	81200	LABOR	NR		\$46,209 Peak bus, rail vehicles		7	\$352,671								
Fringe Benefits	08	81	81200	FRINGE	NR		\$192,794 Office wages			\$233,328								
Contractual Services	08	81	81200	SERV	NR		\$15,500 Office empl.			\$19,012								
Materials and Supplies	08	81	81200	MATL	NR		\$2,000 Office empl.			\$2,453								

MARTA O&M COST MODEL
Line Item Detail

NSAS AIL 1
HRT & LRT

Cost Item	Div	Dept	Office	Cost Type	Labor Status	Pos. Code	Baseline Unit Cost	Cost Driver	ESTIMATED		DEPARTMENT/COST CENTER						Total Cost
									Head-Count	Cost	Total Headcount	Cap/Op	Distri.	Non-Rep	FullPart	Time Distrib	
Other Non-Operating Expenses	08	81	81200	OTHER			\$18,000	Office empl.		\$22,079							
Human Resources & Equal Opport.	08	82	82100	LABOR	NR		\$128,448	FIX	2	\$140,044	2	2		0	2	0	\$193,974
V.P. Human Resource & OEO	08	82	82100	FRINGE			\$32,324	Office wages		\$35,243							
Salaries and Wages	08	82	82100	MATL			\$5,136	Office empl.		\$5,603							
Fringe Benefits	08	82	82100	OTHER			\$12,000	Office empl.		\$13,084							
Materials and Supplies	08	82	82100	OTHER													
Other Non-Operating Expenses	08	82	82200	LABOR	NR		\$289,753	FIX	6	\$315,917	63	63		0	62	1	\$4,932,542
Employee Development	08	82	82200	LABOR	NR		\$38,731	Bus & train hours & miles		\$2,425,865							
Salaries and Wages	08	82	82200	LABOR	NR		\$28,148	FIX	56	\$27,417							
Secretary	08	82	82200	LABOR	R	553	\$28,165	Office NR wages	1	\$37,388							
Overtime	08	82	82200	LABOR	NR		\$521,442	Office wages		\$742,860							
Fringe Benefits	08	82	82200	FRINGE			\$337,250	Office empl.		\$482,810							
Contractual Services	08	82	82200	SERV			\$278,263	Office empl.		\$386,630							
Materials and Supplies	08	82	82200	MATL			\$350,000	Office empl.		\$500,896							
Other Non-Operating Expenses	08	82	82300	OTHER					18		18	18		0	18	0	\$1,252,971
Compensation & Benefits	08	82	82300	LABOR	NR		\$120,388	FIX	2	\$131,259							
Salaries and Wages	08	82	82300	LABOR	NR		\$41,081	# Div 02 and 04 empl.	16	\$716,645							
Salaries and Wages	08	82	82300	LABOR	NR		\$961	Office wages		\$1,424							
Overtime	08	82	82300	LABOR	NR		\$144,258	Office wages		\$213,737							
Fringe Benefits	08	82	82300	FRINGE			\$73,000	Office empl.		\$110,204							
Contractual Services	08	82	82300	SERV			\$13,580	Office empl.		\$20,301							
Materials and Supplies	08	82	82300	MATL			\$38,140	# Div 02 and 04 empl.		\$59,201							
Other Non-Operating Expenses	08	82	82400	OTHER					9		9	9		0	9	0	\$844,777
Equal Opportunity	08	82	82400	LABOR	NR		\$453,809	FIX		\$484,787							
Salaries and Wages	08	82	82400	FRINGE			\$114,205	Office wages		\$124,518							
Fringe Benefits	08	82	82400	SERV			\$6,000	Office empl.		\$6,542							
Contractual Services	08	82	82400	MATL			\$2,313	Office empl.		\$2,522							
Materials and Supplies	08	82	82400	OTHER			\$15,050	Office empl.		\$16,409							
Other Operating Expenses	08	82	82500	LABOR	NR		\$204,878	FIX	4	\$223,378	4	4		0	4	0	\$317,764
Salaries and Wages	08	82	82500	FRINGE			\$51,558	Office wages		\$56,215							
Contractual Services	08	82	82500	SERV			\$30,000	Office empl.		\$32,709							
Materials and Supplies	08	82	82500	OTHER			\$5,000	Office empl.		\$5,451							
Other Non-Operating Expenses	08	82	82600	LABOR	NR		\$361,146	FIX	7	\$393,757	21	21		0	21	0	\$2,088,555
Employee Relations	08	82	82600	LABOR	NR		\$36,915	# Div 02 and 04 empl.	14	\$653,475							
Salaries and Wages	08	82	82600	LABOR	NR		\$58,107	Office wages		\$73,542							
Overtime	08	82	82600	FRINGE			\$221,614	Office wages		\$280,480							
Fringe Benefits	08	82	82600	SERV			\$19,070	Office empl.		\$25,684							
Contractual Services	08	82	82600	MATL			\$34,180	Office empl.		\$46,035							
Materials and Supplies	08	82	82600	MISC			\$48,500	Office empl.		\$56,668							
Miscellaneous Expenses	08	82	82600	OTHER			\$411,616	# Div 02 and 04 empl.		\$638,514							
Other Non-Operating Expenses	08	82	82600	OTHER													
Information Systems	08	83	83100	LABOR	NR		\$410,136	FIX	8	\$447,170	16	16		0	8	0	\$1,205,947
V.P. Information Technology	08	83	83100	LABOR	NR		\$40,000	Bus & train hours & miles		\$305,283							
Salaries and Wages	08	83	83100	LABOR	NR		\$45,051	FIX	7	\$49,119							
Year 2000 Project Coordinator	08	83	83100	LABOR	PT/C	913	\$161,884	Office wages	1	\$176,502							
Fringe Benefits	08	83	83100	FRINGE			\$76,000	Bus & train hours & miles		\$112,224							
Contractual Services	08	83	83100	SERV			\$18,000	Office empl.		\$17,445							
Materials and Supplies	08	83	83100	MATL			\$10,000	Office empl.		\$10,903							
Miscellaneous Expenses	08	83	83100	MISC			\$80,070	Office empl.		\$87,300							
Other Non-Operating Expenses	08	83	83100	OTHER													

MARTA O&M COST MODEL

Line Item Detail

NSAS Alt. 1
HRT & LRT

Cost Item	Div	Dept	Office	Cost Type	Labor Status	Pos. Code	Baseline Unit Cost	Cost Driver	Head-Count	ESTIMATED		DEPARTMENT/COST CENTER					Total Cost
										Cost	Total	Cap/Ops	Distrib.	Full/Part Time Distrib.	PT/Contr.		
IT Applications & Systems	08	83	83300	LABOR	NR		\$249,239	FIX	4	\$271,745	27	27	0	27	0	0	\$3,364,353
Salaries and Wages	08	83	83300	LABOR	NR	188	\$51,135	Bus & train hours & miles	23	\$1,282,305							
Information System Analyst	08	83	83300	FRINGE			\$270,227	Office wages		\$375,443							
Fringe Benefits	08	83	83300	SERV			\$900,390	Bus & train hours & miles		\$1,329,549							
Contractual Services	08	83	83300	MATL			\$5,000	Office empl.		\$7,009							
Materials and Supplies	08	83	83300	OTHER			\$70,125	Office empl.		\$98,302							
Other Non-Operating Expenses	08	83	83400	LABOR	NR		\$429,015	FIX	7	\$487,754	7	7	0	7	0	0	\$1,076,202
IT Planning & Development	08	83	83400	FRINGE			\$102,963	Office wages		\$112,261							
Salaries and Wages	08	83	83400	SERV			\$318,766	Bus & train hours & miles		\$470,702							
Contractual Services	08	83	83400	OTHER			\$23,375	Office empl.		\$25,486							
Other Non-Operating Expenses	08	83	83700	LABOR	NR		\$1,041,776	FIX	24	\$1,135,646	51	51	0	51	0	0	\$6,554,285
IT Oper. & Management	08	83	83700	LABOR	NR	189	\$46,075	Bus & train hours & miles	18	\$904,231							
Salaries and Wages	08	83	83700	LABOR	NR	190	\$46,889	Bus & train hours & miles	9	\$480,111							
Systems Programmer	08	83	83700	FRINGE			\$510,343	Office wages		\$648,030							
Fringe Benefits	08	83	83700	SERV			\$1,352,720	Bus & train hours & miles		\$1,997,477							
Contractual Services	08	83	83700	UTIL			\$899,058	Office empl.		\$1,134,925							
Telephone & Internet	08	83	83700	MATL			\$127,000	Office empl.		\$160,487							
Materials and Supplies	08	83	83700	OTHER			\$99,550	Office empl.		\$113,169							
Other Non-Operating Expenses	08	83	83700	LABOR	NR		\$130,754	FIX	2	\$142,561	2	2	0	2	0	0	\$180,252
Finance and Administration	08	84	84100	LABOR	NR		\$26,820	Office wages		\$29,242							
Salaries and Wages	08	84	84100	FRINGE			\$250	Office empl.		\$273							
Fringe Benefits	08	84	84100	MATL			\$7,500	Office empl.		\$6,177							
Materials and Supplies	08	84	84100	OTHER													
Other Non-Operating Expenses	08	84	84200	LABOR	NR		\$280,390	FIX	4	\$289,903	190	190	0	38	43	111	\$7,754,333
Salaries and Wages	08	84	84200	LABOR	NR		\$30,175	Peak bus, rail vehicles	32	\$1,052,801							
Encoder Clerk	08	84	84200	LABOR	R	554	\$50,292	FIX	2	\$54,833							
Revenue Agent	08	84	84200	LABOR	R	555	\$34,588	Peak bus, rail vehicles	41	\$1,546,139							
Parking Clerk/Attendant	08	84	84200	LABOR	PT/C	912	\$19,477	Peak bus, rail vehicles	15	\$318,536							
Other Part-Time/Contract Empl.	08	84	84200	LABOR	PT/C	914	\$12,018	Heavy rail stations	63	\$825,503							
Overtime	08	84	84200	LABOR	PT/C	915	\$11,086	Total rail stations	33	\$398,164							
Fringe Benefits	08	84	84200	LABOR	NR		\$97,854	Office NR wages		\$141,522							
Contractual Services	08	84	84200	LABOR	R		\$97,854	Office R wages		\$153,778							
Materials and Supplies	08	84	84200	FRINGE			\$680,836	Office wages		\$1,001,243							
Other Non-Operating Expenses	08	84	84200	SERV			\$1,283,026	Garages, yards, stations		1,812,166							
Accounting	08	84	84200	MATL			\$100,200	Office empl.		\$144,148							
Salaries and Wages	08	84	84200	OTHER			\$15,000	Office empl.		\$21,579							
Salaries and Wages	08	84	84300	LABOR	NR		\$337,914	FIX	5	\$368,427	65	65	0	65	0	0	\$3,538,386
Salaries and Wages	08	84	84300	LABOR	NR		\$36,403	Peak bus, rail vehicles	60	\$2,381,408							
Overtime	08	84	84300	LABOR	NR		\$0	Office wages		\$0							
Fringe Benefits	08	84	84300	FRINGE			\$488,306	Office wages		\$734,475							
Contractual Services	08	84	84300	SERV			\$11,000	Office empl.		\$16,947							
Materials and Supplies	08	84	84300	MATL			\$8,500	Office empl.		\$13,095							
Miscellaneous Expenses	08	84	84300	MISC			\$500	Office empl.		\$770							
Other Non-Operating Expenses	08	84	84300	OTHER			\$15,100	Office empl.		\$23,264							
Contracts & Procurement	08	84	84400	LABOR	NR		\$539,092	FIX	10	\$587,771	47	47	0	47	0	0	\$2,924,857
Salaries and Wages	08	84	84400	LABOR	NR		\$41,366	Bus & rail vehicle-miles	37	\$1,666,765							
Fringe Benefits	08	84	84400	FRINGE			\$366,252	Office wages		\$570,305							

MARTA O&M COST MODEL

Line Item Detail

NSAS Alt. 1
HRT & LRT

Cost Item	Div	Dept	Office	Cost Type	Labor Status	Pos. Code	Baseline Unit Cost	Cost Driver	Head-Count	ESTIMATED			DEPARTMENT/COST CENTER				Total Cost		
										Count	Cost	Headcount	Cap/Ops Obs.	Distrib. Cap.	Non-Rep.	Full/Part Time Distrib. Rep.		PT/Contr.	
Contractual Services	08	84	84400	SERV			\$5,300	Office empl.			\$8,487								
Materials and Supplies	08	84	84400	MATL			\$15,000	Office empl.			\$24,021								
Miscellaneous Expenses	08	84	84400	MISC			\$21,500	Office empl.			\$34,430								
Other Non-Operating Expenses	08	84	84400	OTHER			\$19,408	Office empl.			\$31,079								
Administrative Services	08	84	84500				\$550,903	FIX											
Salaries and Wages	08	84	84500	LABOR	NR		\$27,513	Yards, garages	12		\$423,041								
Salaries and Wages	08	84	84500	LABOR	NR		\$29,363	Yards, garages	9		\$192,589								
Salaries and Wages	08	84	84500	LABOR	R		\$14,824	Office NR wages	15		\$480,222								
Overtime (straight time empl)	08	84	84500	LABOR			\$9,315	Office R wages			\$12,275								
Overtime (hourly empl)	08	84	84500	FRINGE			\$283,125	Office wages			\$12,695								
Fringe Benefits	08	84	84500	SERV			\$520,067	Yards, garages			\$293,342								
Contractual Services	08	84	84500	MATL			\$428,173	Yards, garages			\$708,765								
Materials and Supplies	08	84	84500	FUEL			\$3,649	Office empl.			\$583,545								
Non-Rev. Veh. Fuel Taxes	08	84	84500	INS			\$8,650	Office empl.			\$7,152								
Casualty and Liability	08	84	84500	MISC			\$119,440	Office empl.			\$10,952								
Miscellaneous Expenses	08	84	84500	OTHER			\$21,268	Office empl.			\$151,229								
Other Non-Operating Expenses	08	84	84500								\$28,929								
Legal Services	08	85																	
V.P. Legal Services	08	85	85100	LABOR	NR		\$282,909	FIX	5		\$308,455								
Salaries and Wages	08	85	85100	LABOR	NR		\$57,676	# Div 02 and 04 empl.	19		\$1,194,801								
Salaries and Wages	08	85	85100	LABOR	NR		\$9,875	Office wages			\$14,375								
Overtime	08	85	85100	FRINGE			\$233,415	Office wages			\$339,772								
Fringe Benefits	08	85	85100	SERV			\$1,135,200	# Div 02 and 04 empl.			\$1,478,489								
Contractual Services	08	85	85100	MATL			\$6,000	Office empl.			\$8,722								
Materials and Supplies	08	85	85100	OTHER			\$96,500	Office empl.			\$140,265								
Other Non-Operating Expenses	08	85	85200																
Risk Management	08	85	85200	LABOR	NR		\$372,897	FIX	7		\$406,569								
Salaries and Wages	08	85	85200	LABOR	NR		\$36,588	Total vehicle-hours	12		\$478,700								
Salaries and Wages	08	85	85200	LABOR	R		\$73,603	FIX	3		\$80,249								
Fringe Benefits	08	85	85200	FRINGE			\$257,551	Office wages			\$320,538								
Contractual Services	08	85	85200	SERV			\$255,500	Office empl.			\$322,556								
Materials and Supplies	08	85	85200	MATL			\$12,000	Office empl.			\$15,149								
Casualty and Liability	08	85	85200	INS			\$4,661,444	50% FIX; 50% tot veh-hr			\$5,876,989								
Other Non-Operating Expenses	08	85	85200	OTHER			\$40,000	Office empl.			\$50,488								
ADJUSTMENTS	09	99	99999																
Inventory Adjustment	09	99	99991	MATL			\$800,000	FIX			\$372,238								
Subtotal 1											\$476,780,970								
Contingency	09	99	99992	CONT			1.02% of Subtotal 1				\$4,862,325								
Capitalized Expenses	09	99	99993	Capital			-0.61% of Subtotal 1				\$481,643,295								
TOTAL									6,620		\$454,877,769	6,620	6,620	0	2,129	3,981	503	\$454,877,769	

NOTES:
[1] Costs in 1999 dollars, unless inflated per factors in Summary Table.
[2] Labor Status categories = R (represented), NR (non-represented), and PTC (part-time/contract).

APPENDIX C

Transit Cost Estimate Details

NSAS TRANSIT O&M COSTS

Mode	Alternative	Peak Cars	Ann. Rev. Car-Mi's. (millions)	Ann. Rev. Train-Hrs. (thousands)	Stations	Maint. Yards	Dir. Route Miles	Total Ann. O&M Cost (HRT & LRT)	Attributable Ann. O&M Cost
HRT	RTP (excl. NW Line, N Line Ext. & Cumb. Circ.)	262	35.83	234.2	38	3	110.6		
	Baseline	286	42.95	258.5	41	3	134		
	Alt. 1	286	42.95	258.5	43	3	134		
	Alt. 2	286	42.95	258.5	43	3	134		
	Alt. 3	286	42.95	258.5	41	3	134		
LRT	RTP (excl. NW Line, N Line Ext. & Cumb. Circ.)	27	2.57	54.3	12	1	24.8		
	Baseline	77	9.65	113.8	25	2	68.4		
	Alt. 1	67	9.06	113.8	25	2	68.4		
	Alt. 2	77	9.65	113.8	25	2	68.4		
	Alt. 3	77	9.65	113.8	25	2	68.4		
TOTAL NSAS HRT/LRT COSTS	RTP (excl. NW Line, N Line Ext. & Cumb. Circ.)							\$394,175,252	
	RTP							\$453,952,359	
	Baseline								\$59,777,107
	Alt. 1							\$454,877,769	\$60,702,517
	Alt. 2							\$456,158,892	\$61,983,640
	Alt. 3							\$453,952,359	\$59,777,107

(HRT/LRT costs are driven by all above variables in the HRT/LRT cost model.)

		Ann. Rev. Car-Hrs. (thousands)	
People Movers	Baseline	43.2	\$8,294,400
	Alt. 1	43.2	\$8,294,400
	Alt. 2	43.2	\$8,294,400
	Alt. 3	79.2	\$15,206,400

(People Mover costs are driven by Ann. Rev. Car-Hrs. * \$192.)

		Peak Buses	Ann. Rev. Bus-Mi's. (millions)	Ann. Rev. Bus-Hrs. (thousands)				
BRT	Baseline							\$0
	Alt. 1	75	11.37	370.5	17	1	61.4	\$29,379,459
	Alt. 2	105	13.02	424.0	17	1	61.4	\$34,089,534
	Alt. 3	24	2.52	99.4	9	1	26.6	\$8,235,512

(BRT costs are driven by Peak Buses, Ann. Rev. Bus-Mi, and Ann. Rev. Bus-Hrs.
plus an add-on for station maintenance and security.)

		Peak Buses	Ann. Rev. Bus-Mi's.	Ann. Rev. Bus-Hrs.	
Buses	Baseline	473	21,902,430	1,579,428	\$101,273,022
	Alt. 1	587	31,011,303	2,209,842	\$138,744,556
	Alt. 2	581	31,093,518	2,208,690	\$138,500,286
	Alt. 3	509	26,539,173	1,816,062	\$115,956,469

Bus cost factors are:

Veh. Oper. \$/Rev. Hr. \$40.83
 Veh. Maint. \$/Rev. Mi. \$0.75
 Other \$/Peak Bus \$43,118.48

NSAS TRANSIT COSTS

Scenario: BASELINE

Northwest Line	21.6 Mi.			<u>Source:</u>
Arts Center to Cumberland	AR 251A	\$640,900,000		2025 RTP Limited Update
Cumberland to Marietta	AR 251B	\$685,000,000		2025 RTP Limited Update
Marietta to Town Center	AR 251C	\$561,200,000		2025 RTP Limited Update
LRV		included		
LRV maintenance facility		included		
TOTAL		\$1,887,100,000		
MARTA North Line	11.7 Mi.	\$1,074,211,000		GRTA Capital Cost Methodology
North Springs to Holcomb Bridge	M-AR 234 A			
Holcomb Bridge to Haynes Bridge	M-AR 234 B			
Haynes Bridge to Woodward	M-AR 234 C			
HRV (29 vehicles)	M-AR 262, 264			
Cumberland People Mover	AR 259	\$250,000,000		2025 RTP Limited Update
Buses				
Express	162	\$52,749,000		GRTA Capital Cost Methodology*
Local	382	\$134,001,000		GRTA Capital Cost Methodology*
Park-and Ride/Bus Transfer Facility				
GA 400/SR 306	500 sp + 2 bay	\$4,500,000		GRTA Capital Cost Methodology**
Downtown Cumming	200 sp + 1 bay	\$1,900,000		GRTA Capital Cost Methodology**
GA 400/Old Atlanta Rd	500 sp + 2 bay	\$4,500,000		GRTA Capital Cost Methodology**
GA 400/McFarland Rd	500 sp + 2 bay	\$5,700,000		GRTA Capital Cost Methodology**
GA 400/Old Milton Pkwy	500 sp + 2 bay	\$5,700,000		GRTA Capital Cost Methodology**
SR 141/McGinnis Ferry Rd	300 sp + 2 bay	\$3,700,000		GRTA Capital Cost Methodology**
I-85/Sugarloaf Pkwy		Authorized		2025 RTP Limited Update
SR 316/Collins Hill Rd		Authorized		2025 RTP Limited Update
I-75/SR92 & Cowan Rd		Authorized		2025 RTP Limited Update
I-575/Dupree Rd	500 sp + 2 bay	\$7,000,000		GRTA Capital Cost Methodology**
SR 140/SR 20 (Canton)	200 sp + 1 bay	\$2,600,000		GRTA Capital Cost Methodology**
TOTAL TRANSIT CAPITAL COST		\$3,433,661,000		
ANNUAL TRANSIT O&M COST				
Fixed Guideway	\$68,072,000			Fixed Guideway O&M Cost Model
Bus	\$101,273,000			Bus O&M Cost Model
TOTAL		\$169,345,000		

* Current year dollar cost estimates for transit vehicles (buses and rail cars) based on unit costs from GRTA Capital Cost Methodology

** Cost estimates for transit support facilities (e.g., park and ride/bus transfer facilities, maintenance facilities, and bus garages), include estimates for design, right-of-way, and construction in current year dollars based on unit costs from GRTA Capital Cost Methodology

NSAS TRANSIT COSTS

Scenario: Alternative 1

Northwest Line				<u>Source:</u>
Arts Center to Town Center	21.6 Mi.	\$1,887,100,000		2025 RTP Limited Update
MARTA North Line				
North Springs to Windward	11.7 Mi.	\$1,199,731,000		GRTA Capital Cost Methodology
Cumberland People Mover	5.2 Mi.	\$250,000,000		2025 RTP Limited Update
I-285 Line, Cumberland to Doraville	12.7 Mi.	\$368,985,000		GRTA Capital Cost Methodology
Northeast Line, Doraville to Discover Mills	13.1 Mi.	\$319,053,000		GRTA Capital Cost Methodology
Light rail vehicles (change from Baseline)	-12	(\$43,164,000)		GRTA Capital Cost Methodology*
BRT vehicles	90	\$135,378,000		GRTA Capital Cost Methodology*
BRT maintenance facility		\$35,182,000		GRTA Capital Cost Methodology**
Buses				
Express	104	\$33,863,000		GRTA Capital Cost Methodology*
Local	572	\$200,651,000		GRTA Capital Cost Methodology*
Bus garage (131 incr. over Baseline)		\$30,491,000		GRTA Capital Cost Methodology**
Park-and-Ride/Bus Transfer Facility				
GA 400/SR 306	500 sp + 2 bay	\$4,500,000		GRTA Capital Cost Methodology**
Downtown Cumming	200 sp + 1 bay	\$1,900,000		GRTA Capital Cost Methodology**
GA 400/Old Atlanta Rd	500 sp + 2 bay	\$4,500,000		GRTA Capital Cost Methodology**
GA 400/McFarland Rd	500 sp + 2 bay	\$5,700,000		GRTA Capital Cost Methodology**
SR 141/McGinnis Ferry Rd	300 sp + 2 bay	\$3,700,000		GRTA Capital Cost Methodology**
I-85/Hamilton Mill Rd	500 sp + 2 bay	\$5,700,000		GRTA Capital Cost Methodology**
SR 316/Collins Hill Rd		Authorized		2025 RTP Limited Update
I-75/SR92 & Cowan Rd		Authorized		2025 RTP Limited Update
I-575/Dupree Rd	500 sp + 2 bay	\$7,000,000		GRTA Capital Cost Methodology**
SR 140/SR 20 (Canton)	200 sp + 1 bay	\$2,600,000		GRTA Capital Cost Methodology**
SR 92/Sandy Plains Rd	200 sp + 1 bay	\$1,900,000		GRTA Capital Cost Methodology**
TOTAL TRANSIT CAPITAL COST		\$4,454,770,000		
ANNUAL TRANSIT O&M COST				
Fixed Guideway	\$98,376,000			Fixed Guideway O&M Cost Model
Bus	\$138,745,000			Bus O&M Cost Model
TOTAL		\$237,121,000		

* Current year dollar cost estimates for transit vehicles (buses and rail cars) based on unit costs from GRTA Capital Cost Methodology

** Cost estimates for transit support facilities (e.g., park and ride/bus transfer facilities, maintenance facilities, and bus garages), include estimates for design, right-of-way, and construction in current year dollars based on unit costs from GRTA Capital Cost Methodology

NSAS TRANSIT COSTS

Scenario:	Alternative 2			
Northwest Line			<u>Source:</u>	
Arts Center to Town Center	21.6 Mi.	\$1,887,100,000	2025 RTP Limited Update	
MARTA North Line				
North Springs to Windward	11.7 Mi.	\$1,199,731,000	GRTA Capital Cost Methodology	
Cumberland People Mover	5.2 Mi.	\$250,000,000	2025 RTP Limited Update	
I-285 Line, Cumberland to Doraville	12.7 Mi.	\$368,985,000	GRTA Capital Cost Methodology	
Northeast Line, Doraville to Discover Mills	13.1 Mi.	\$319,053,000	GRTA Capital Cost Methodology	
Light rail vehicles	(change from Baseline)	0	\$0	
BRT vehicles	126	\$189,529,000	GRTA Capital Cost Methodology*	
BRT maintenance facility		\$46,909,000	GRTA Capital Cost Methodology**	
Buses				
Express	98	\$31,910,000	GRTA Capital Cost Methodology*	
Local	570	\$199,950,000	GRTA Capital Cost Methodology*	
Bus garage	(124 incr. over Baseline)	\$30,491,000	GRTA Capital Cost Methodology**	
Park-and Ride/Bus Transfer Facility				
GA 400/SR 306	500 sp + 2 bay	\$4,500,000	GRTA Capital Cost Methodology**	
Downtown Cumming	200 sp + 1 bay	\$1,900,000	GRTA Capital Cost Methodology**	
GA 400/Old Atlanta Rd	500 sp + 2 bay	\$4,500,000	GRTA Capital Cost Methodology**	
GA 400/McFarland Rd	500 sp + 2 bay	\$5,700,000	GRTA Capital Cost Methodology**	
SR 141/McGinnis Ferry Rd	300 sp + 2 bay	\$3,700,000	GRTA Capital Cost Methodology**	
I-85/Hamilton Mill Rd	500 sp + 2 bay	\$5,700,000	GRTA Capital Cost Methodology**	
SR 316/Collins Hill Rd		Authorized	2025 RTP Limited Update	
I-75/SR92 & Cowan Rd		Authorized	2025 RTP Limited Update	
I-575/Dupree Rd	500 sp + 2 bay	\$7,000,000	GRTA Capital Cost Methodology**	
SR 140/SR 20 (Canton)	200 sp + 1 bay	\$2,600,000	GRTA Capital Cost Methodology**	
SR 92/Sandy Plains Rd	200 sp + 1 bay	\$1,900,000	GRTA Capital Cost Methodology**	
TOTAL TRANSIT CAPITAL COST		\$4,561,158,000		
ANNUAL TRANSIT O&M COST				
Fixed Guideway	\$104,368,000	Fixed Guideway O&M Cost Model		
Bus	\$138,500,000	Bus O&M Cost Model		
TOTAL	\$242,868,000			

* Current year dollar cost estimates for transit vehicles (buses and rail cars) based on unit costs from GRTA Capital Cost Methodology

** Cost estimates for transit support facilities (e.g., park and ride/bus transfer facilities, maintenance facilities, and bus garages), include estimates for design, right-of-way, and construction in current year dollars based on unit costs from GRTA Capital Cost Methodology

NSAS TRANSIT COSTS

Scenario: Alternative 3

Northwest Line			<u>Source:</u>
Arts Center to Town Center	21.6 Mi.	\$1,887,100,000	2025 RTP Limited Update
MARTA North Line			
North Springs to Windward	11.7 Mi.	\$1,074,211,000	GRTA Capital Cost Methodology
Cumberland People Mover	5.2 Mi.	\$250,000,000	2025 RTP Limited Update
Perimeter People Mover	N/A	\$200,000,000	Fulton & DeKalb Co. Comp. Plans
I-285 Line, Cumberland to Doraville	12.7 Mi.	\$368,985,000	GRTA Capital Cost Methodology
Light rail vehicles (change from Baseline)	0	\$0	
BRT vehicles	29	\$43,622,000	GRTA Capital Cost Methodology*
BRT maintenance facility		\$11,727,000	GRTA Capital Cost Methodology**
Buses			
Express	117	\$38,096,000	GRTA Capital Cost Methodology*
Local	468	\$164,169,000	GRTA Capital Cost Methodology*
Bus garage (41 incr. over Baseline)		\$11,727,000	GRTA Capital Cost Methodology**
Park-and Ride/Bus Transfer Facility			
Downtown Cumming	200 sp + 1 bay	\$1,900,000	GRTA Capital Cost Methodology**
GA 400/Old Atlanta Rd	500 sp + 2 bay	\$4,500,000	GRTA Capital Cost Methodology**
GA 400/McFarland Rd	500 sp + 2 bay	\$5,700,000	GRTA Capital Cost Methodology**
GA 400/Old Milton Pkwy	500 sp + 2 bay	\$5,700,000	GRTA Capital Cost Methodology**
SR 141/McGinnis Ferry Rd	300 sp + 2 bay	\$3,700,000	GRTA Capital Cost Methodology**
I-85/Hamilton Mill Rd	500 sp + 2 bay	\$5,700,000	GRTA Capital Cost Methodology**
I-85/SR20	300 sp + 2 bay	\$3,700,000	GRTA Capital Cost Methodology**
I-85/Sugarloaf Pkwy		Authorized	2025 RTP Limited Update
SR 316/Collins Hill Rd		Authorized	2025 RTP Limited Update
Buford Hwy/Lawrenceville-Suwanee Rd	300 sp + 2 bay	\$2,800,000	GRTA Capital Cost Methodology**
I-75/SR92 & Cowan Rd		Authorized	2025 RTP Limited Update
I-575/Dupree Rd	500 sp + 2 bay	\$7,000,000	GRTA Capital Cost Methodology**
SR 140/SR 20 (Canton)	200 sp + 1 bay	\$2,600,000	GRTA Capital Cost Methodology**
SR 92/King & Woodstock Rds	200 sp + 1 bay	\$2,600,000	GRTA Capital Cost Methodology**
Holcomb Bridge Rd/Nesbitt Ferry Rd	200 sp + 1 bay	\$2,600,000	GRTA Capital Cost Methodology**
TOTAL TRANSIT CAPITAL COST		\$4,098,137,000	
ANNUAL TRANSIT O&M COST			
Fixed Guideway	\$83,219,000		Fixed Guideway O&M Cost Model
Bus	\$115,956,000		Bus O&M Cost Model
TOTAL		\$199,175,000	

* Current year dollar cost estimates for transit vehicles (buses and rail cars) based on unit costs from GRTA Capital Cost Methodology

** Cost estimates for transit support facilities (e.g., park and ride/bus transfer facilities, maintenance facilities, and bus garages), include estimates for design, right-of-way, and construction in current year dollars based on unit costs from GRTA Capital Cost Methodology